U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

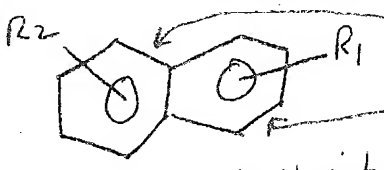
SEARCH REQUEST FORM 2623

Requestor's Name: Bertch Serial Number: 08/522349

Date: 2/17 Phone: 4718 Art Unit: 1611 4015

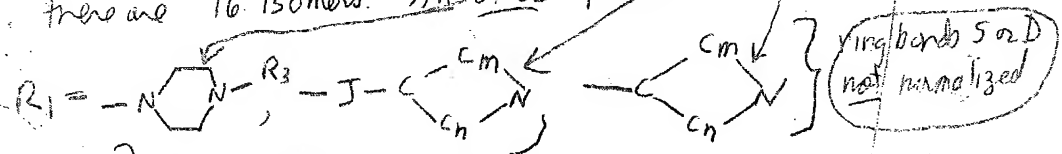
Search Topic:

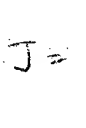
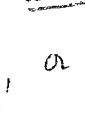
Please write a detailed statement of search topic. Describe specifically as possible the subject matter to be searched. Define any terms that may have a special meaning. Give examples or relevent citations, authors, keywords, etc., if known. For sequences, please attach a copy of the sequence. You may include a copy of the broadest and/or most relevent claim(s).



No fusion permitted

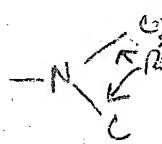
R_1 and R_2 must be on one of the 4 positions on furan ring. Thus, there are 16 isomers. All other positions must be H or CH_3



J =  or  , m, n = 0-4, A = H/CH_3

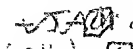
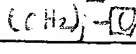
obviously, one must be ≠ 0

R_2 = anything, including H except:



Halo, 

R_3 = H, -J-O-C_{1-4} alkyl

C_{1-5} alkyl,  or  , = 1-6

Point of Contact:
Mary Hale
Technical Info. Specialist
CM1 12D16 Tel: 308-4258

MARY

10 stems

rec'd 2/20

STAFF USE ONLY

Date completed: 2/20
Searcher: Mary 4258
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Elapsed time: _____
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Total time: _____
Number of Searches: _____
Number of Databases: _____

Search Site
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_____ CM-1
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Type of Search
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Vendors
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_____ Other

BERCH
522349

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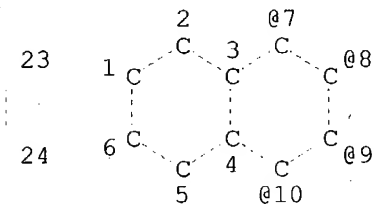

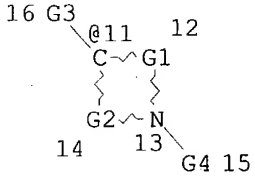

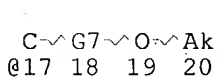

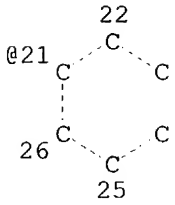

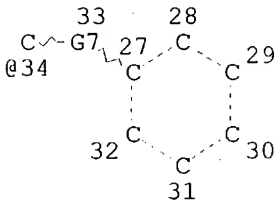


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REP G2=(0-4) CH
VAR G3=H/ME
VAR G4=H/17/ME/ET/I-PR/N-PR/T-BU/S-BU/I-BU/N-BU/21/34
REP G7=(0-1) CH2
VPA 11-7/8/9/10 U
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DEFAULT ECLEVEL IS LIMITED

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RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  34

STEREO ATTRIBUTES: NONE
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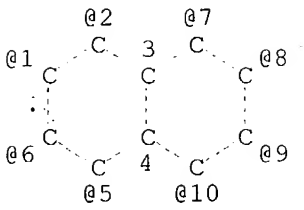

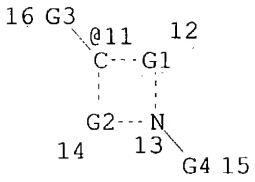

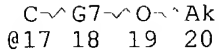

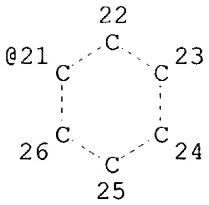

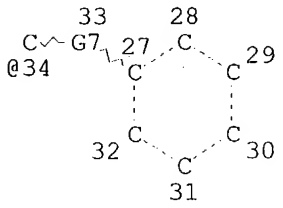

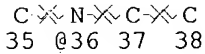

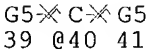

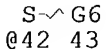

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REP G2=(0-4) CH
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VAR G4=H/17/ME/ET/I-PR/N-PR/T-BU/S-BU/I-BU/N-BU/21/34
VAR G5=C/N
VAR G6=C/H
REP G7=(0-1) CH2
VAR G8=36/40/42/X
VPA 11-7/8/9/10 U
VPA 44-1/2/6/5 U
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 44

STEREO ATTRIBUTES: NONE
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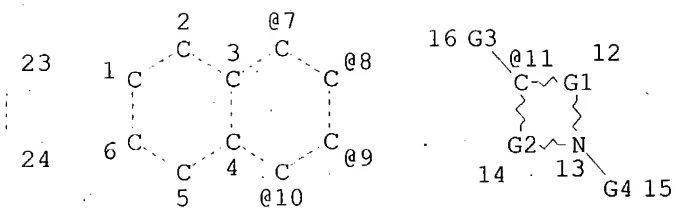
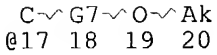
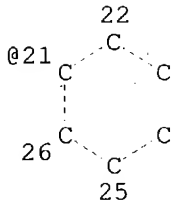
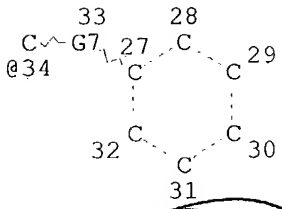
L4 STR









modifications

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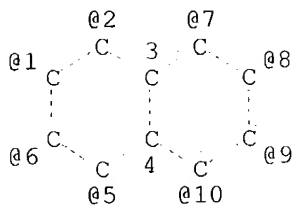
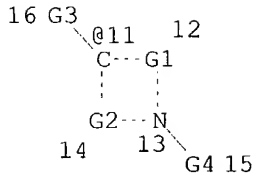
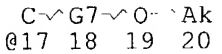
REP G2=(0-2) CH
VAR G3=H/ME
VAR G4=H/17/ME/ET/I-PR/N-PR/T-BU/S-BU/I-BU/N-BU/21/34
REP G7=(0-1) CH2
VPA 11-7/8/9/10 U
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

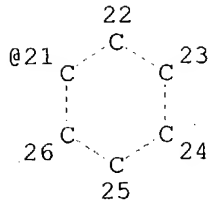
GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 34

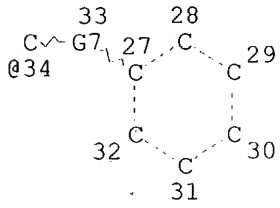
STEREO ATTRIBUTES: NONE
L5 STR

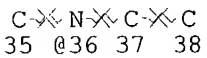


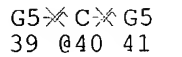


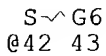












G8 @44

modifications

REP G1=(1-2) CH
REP G2=(0-2) CH
VAR G3=H/ME
VAR G4=H/17/ME/ET/I-PR/N-PR/T-BU/S-BU/I-BU/N-BU/21/34
VAR G5=C/N
VAR G6=C/H
REP G7=(0-1) CH2
VAR G8=36/40/42/X
VPA 11-7/8/9/10 U
VPA 44-1/2/6/5 U
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 44

STEREO ATTRIBUTES: NONE
L7 162 SEA FILE=REGISTRY SUB=L3 SSS FUL L4 NOT L5

100.0% PROCESSED 271 ITERATIONS 162 ANSWERS
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FILE 'CAPLUS' ENTERED AT 12:04:00 ON 17 MAR 1999
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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FILE 'EMBASE' ENTERED AT 12:04:00 ON 17 MAR 1999

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L10 5 FILE BIOSIS
L11 0 FILE EMBASE

TOTAL FOR ALL FILES
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PROCESSING COMPLETED FOR L12
L13 38 DUP REM L12 (3 DUPLICATES REMOVED)

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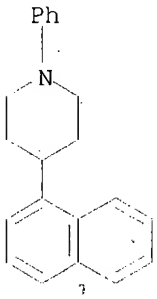
L13 ANSWER 1 OF 38 CAPLUS COPYRIGHT 1999 ACS
1993:670478 Document No. 119:270478 Solvent effects on the structure of fluorescent exciplexes in rigidly, flexibly, and nonbridged donor-acceptor systems. Verhoeven, J. W.; Scherer, T.; Willemse, R. J. (Lab. Org. Chem., Univ. Amsterdam, Amsterdam, 1018 WS, Neth.). Pure Appl. Chem., 65(8), 1717-22 (English) 1993. CODEN: PACHAS. ISSN: 0033-4545.

AB The solvent dependence of the exciplex emission frequency is compared for 2 electron Donor-Acceptor pairs that are either sep. mol. entities, bridged by a flexible trimethylene chain, or bridged by a (semi)rigid piperidine ring. It is concluded that in solvents of intermediate and high polarity the emissive state has a structure involving a rather large DA sepn. in all cases. For the rigidly bridged systems this structure is dictated by the chair conformation of the piperidine ring, for the flexibly bridged systems it implies that in the emissive state the trimethylene chain adopts a (partly) extended conformation and for the nonbridged systems this exciplex structure appears closer to that of a solvent sepd. ion pair (SSIP) than that of a contact ion pair (CIP). In nonpolar media the exciplex structure for flexibly bridged and nonbridged systems appears to involve a much smaller DA distance, compatible with a folded structure or a CIP. Under these conditions the rigidly bridged systems either show no exciplex emission at all (in case the charge sepd. state is thermodynamically inaccessible) or at much higher energies than the flexibly and nonbridged systems. Temp. dependent studies suggest that for flexibly linked systems contg. sufficiently strong DA pairs the folded exciplex obsd. in nonpolar media is formed via a harpooning mechanism involving long-range charge sepn. followed by electrostatically driven

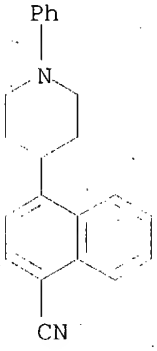
folding.

IT **134142-76-0 149140-89-6**
RL: PRP (Properties)
(intramol. exciplex fluorescence of, solvent effect on)

RN 134142-76-0 CAPLUS
CN Piperidine, 4-(1-naphthalenyl)-1-phenyl- (9CI) (CA INDEX NAME)

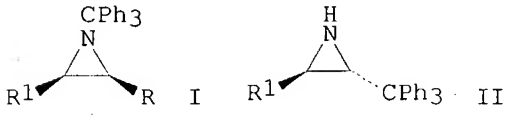


RN 149140-89-6 CAPLUS
CN 1-Naphthalenecarbonitrile, 4-(1-phenyl-4-piperidinyl)- (9CI) (CA INDEX NAME)



L13 ANSWER 2 OF 38 CAPLUS COPYRIGHT 1999 ACS
1993:212780 Document No. 118:212780 Lithiated aziridine reagents. Vedejs, E.; Moss, W. O. (Chem. Dep., Univ. Wisconsin, Madison, WI, 53706, USA). J. Am. Chem. Soc., 115(4), 1607-8 (English) 1993. CODEN: JACSAT. ISSN: 0002-7863. OTHER SOURCES: CASREACT 118:212780; CJACS.

GI



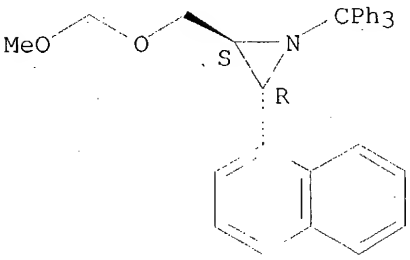
AB Tin-lithium exchange converts the N-trityl aziridine derivs. I (R = SnBu3, R1 = Me, MeOCH2OCH2) into the secondary organolithium reagents I (R = Li)

even though no stabilizing group other than the aziridine is present. The lithioaziridines react with typical electrophiles with retention of stereochem. to give cis-2,3-disubstituted aziridines. The method allows the prepn. of the 2-chloroaziridine I (R = Cl, R1 = MeOCH2OCH2), a suitable substrate for Grignard coupling. In this case, the trans-2,3-disubstituted aziridines are the major products. In contrast to other metalated 3-membered heterocycles, I (R = Li) is resistant to ring opening reactions, and decomps. upon warming by a Stevens-like trityl migration to give II.

IT **147087-73-8P 147087-74-9P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

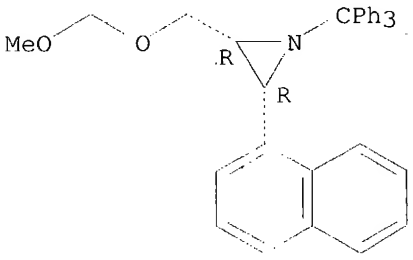
RN 147087-73-8 CAPLUS
CN Aziridine, 2-[(methoxymethoxy)methyl]-3-(1-naphthalenyl)-1-(triphenylmethyl)-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 147087-74-9 CAPLUS
CN Aziridine, 2-[(methoxymethoxy)methyl]-3-(1-naphthalenyl)-1-(triphenylmethyl)-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.



L13 ANSWER 3 OF 38 CAPLUS COPYRIGHT 1999 ACS

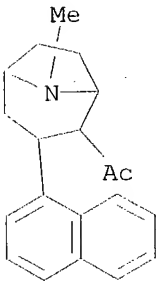
1993:182784 Document No. 118:182784 Novel 2-substituted cocaine analogs: Binding properties at dopamine transport sites in rat striatum. Davies, Huw M. L.; Saikali, Elie; Sexton, Tammy; Childers, Steven R. (Dep. Chem., Wake Forest Univ., Winston-Salem, NC, 27109, USA). Eur. J. Pharmacol., Mol. Pharmacol. Sect., 244(1), 93-7 (English) 1993. CODEN: EJPPET. ISSN: 0922-4106.

AB A novel scheme utilizing vinylcarbenoid precursors has been developed for the synthesis of novel tropane analogs of cocaine. Using this method, 15 analogs were prepd. and tested for activity in binding to dopamine transporters in rat striatal membranes using [125I]RTI-55. In all the

analogs, the aryl group at the 3 position was directly bound to the tropane ring (as in WIN 35,428), and Me or Et ketone moieties were present at the 2 position instead of the typical ester group. The most potent analog was a 2-naphthyl deriv. (IC50 value of 0.2 nM, vs. 170 nM for cocaine), while replacement of the aryl with either Et or cyclohexyl drastically reduced potency (to >50 .mu.M and 5 .mu.M, resp.).

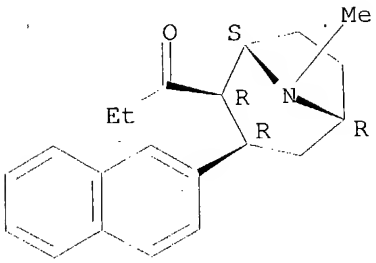
IT **146877-59-0 146877-60-3**
RL: PROC (Process)
(binding of, to dopamine transporter, in striatum, structure in relation to)

RN 146877-59-0 CAPLUS
CN Ethanone, 1-[8-methyl-3-(1-naphthalenyl)-8-azabicyclo[3.2.1]oct-2-yl]-, (exo,exo)- (9CI) (CA INDEX NAME)



RN 146877-60-3 CAPLUS
CN 1-Propanone, 1-[(1R,2S,3S,5S)-8-methyl-3-(2-naphthalenyl)-8-azabicyclo[3.2.1]oct-2-yl]-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



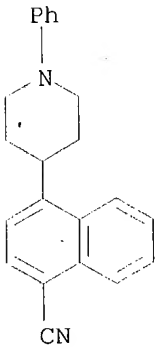
L13 ANSWER 4 OF 38 CAPLUS COPYRIGHT 1999 ACS
1993:538521 Document No. 119:138521 Multiresponse parameter estimation and compartmental analysis of time resolved fluorescence spectra. Application to conformational dynamics of charge-separated species in solution. Van Stokkum, I. H. M.; Brouwer, A. M.; Van Ramesdonk, H. J.; Scherer, T. (Fac. Phys. Astron., Free Univ., Amsterdam, 1081 HV, Neth.). Proc. K. Ned. Akad. Wet.: Biol., Chem., Geol., Phys. Med. Sci., 96(1), 43-68 (English) 1993. CODEN: PKNSEK. ISSN: 0924-8323.

AB 2 Lecture conformational changes of intramol. charge-transfer species were studied by means of time resolved fluorescence spectroscopy. From a time resolved fluorescence spectrum the parameters which describe a kinetic, compartmental, model as well as the model dependent fluorescence spectral-shape parameters were estd. Two methods for parameter estn. were

compared nonlinear least squares and multiresponse. Anal. of residuals revealed shortcomings of the exptl. setup, in particular time jitter. The concn. fluctuations induced by this time jitter could cause failure of the usual nonlinear least squares model fit, whereas the multiresponse parameter estn. was successful. Different compartmental models with the same kinetic parameters result in identical residuals. Thus a distinction can only be made on the basis of the accompanying estd. spectra. Due to the restriction that fluorescence spectra are nonneg., the anal. of a two-component system was only satisfactory using a model in which a slower decaying component was a reaction product of a faster decaying component. A three-component system was satisfactorily described by a model with three independently decaying components.

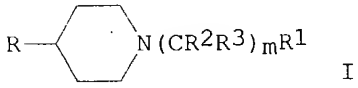
IT **149140-89-6**
RL: PRP (Properties)
(intramol. electron exchange and conformational inversion of, studied by time-resolved fluorescence)

RN 149140-89-6 CAPLUS
CN 1-Naphthalenecarbonitrile, 4-(1-phenyl-4-piperidinyl)- (9CI) (CA INDEX NAME)



L13 ANSWER 5 OF 38 CAPLUS COPYRIGHT 1999 ACS
1992:591696 Document No. 117:191696 Piperidine derivatives. Carter, Paul Andrew; Tapp, Stevens James; Daniels, Nicholas John (Shell Internationale Research Maatschappij B. V., Neth.). Eur. Pat. Appl. EP 494717 A1 19920715, 35 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, PT. (English). CODEN: EPXXDW. APPLICATION: EP 92-200037 19920108. PRIORITY: GB 91-505 19910110.

GI



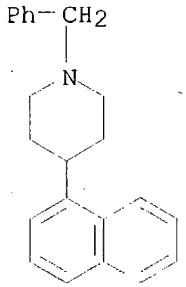
I

AB The present invention consists of title compds. I [R = (un)substituted alkyl, cycloalkyl, aryl, heterocyclyl; R1 = (un)substituted alkyl,

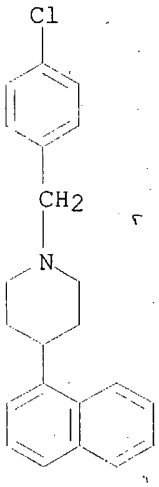
alkenyl, alkynyl, cycloalkyl, aryl, heterocyclyl; m = 0-3; R2, R3 = H, alkyl, Ph; with the proviso that R .noteq. 4-Me3CC6H4] or an acid-addn. salt thereof, a process for the prepn. of these piperidine derivs., compns. contg. such compds. and their use as fungicides. Thus, 4-(4-chlorophenyl)-1,3,5,6-tetrahydropyridine (10.0 g) was hydrogenated over 5% Pd/C in EtOAc (200 mL) to give 99% 4-(4-chlorophenyl)piperidine. The latter compd. (2.0 g) was treated with PhCH2Br (1.22 mL) and K2CO3 (4.26 g) in THF (100 mL) to give 76% N-benzyl-4-(4-chlorophenyl)piperidine (II). II showed >80% control of powdery mildew on barley seedlings and wheat eyespot at dosages of 1000 and 100 ppm resp.

IT **143867-29-2P 143867-30-5P 143867-32-7P 143867-39-4P 143867-41-8P**
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. and fungicidal activity of)

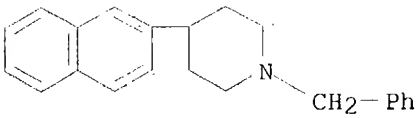
RN 143867-29-2 CAPLUS
CN Piperidine, 4-(1-naphthalenyl)-1-(phenylmethyl)- (9CI) (CA INDEX NAME)



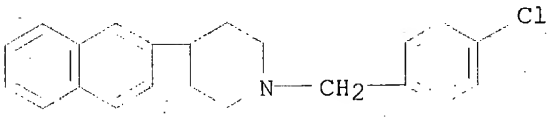
RN 143867-30-5 CAPLUS
CN Piperidine, 1-[(4-chlorophenyl)methyl]-4-(1-naphthalenyl)- (9CI) (CA INDEX NAME)



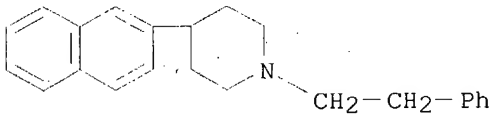
RN 143867-32-7 CAPLUS
CN Piperidine, 4-(2-naphthalenyl)-1-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 143867-39-4 CAPLUS
CN Piperidine, 1-[(4-chlorophenyl)methyl]-4-(2-naphthalenyl)- (9CI) (CA INDEX NAME)



RN 143867-41-8 CAPLUS
CN Piperidine, 4-(2-naphthalenyl)-1-(2-phenylethyl)- (9CI) (CA INDEX NAME)



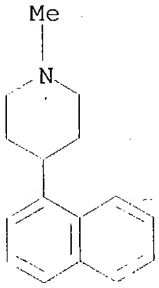
L13 ANSWER 6 OF 38 CAPLUS COPYRIGHT 1999 ACS
1992:128683 Document No. 116:128683 Novel piperidine, tetrahydropyridine, and pyrrolidine derivatives useful as antihypertensives, process for their preparation, and pharmaceutical compositions containing them. Lavielle, Gilbert; Laubie, Michel; Colpaert, Francis (ADIR et Cie., Fr.). Eur. Pat. Appl. EP 466585 A1 19920115, 57 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE. (French). CODEN: EPXXDW. APPLICATION: EP 91-401915 19910710. PRIORITY: FR 90-8729 19900710.

AB Title compds. R1ABR2 [I; R1 = (un)substituted 1-naphthyl or its 3,4-dihydro or 1,2,3,4-tetrahydro derivs., 3-quinolyl, 1,4-benzodioxan-5-yl; A = single or double bond, CH2, CH; B = piperidyl, pyrrolidinyl, 1,2,3,6-tetrahydropyridyl, all bound to A at a C atom and to R2 at the N atom; R2 = H, CH2Ph, alkyl, aminoalkyl, cyanoalkyl, benzamidoalkyl; with a variety of provisos and conditions] and salts, having 5-HT1A receptor activity, were prepd. as antihypertensives and possibly for addnl. uses. For example, lithiation of 1-bromonaphthalene and reaction with 1-methylpiperid-4-one (73%), followed by dehydration of the resulting alc. in 48% HBr (86.65%), gave 1-methyl-4-(1-naphthyl)-1,2,3,4-tetrahydropyridine HBr salt, a title compd. This was sequentially converted to addnl. I by hydrogenation, demethylation, N-alkylation with BrCH2CN, etc. As an example using anesthetized dogs, two compds. I showed antihypertensive activity comparable or superior to both racemic and (+)-flesinoxan. Over 30 synthetic examples, 1H-NMR data for various I and intermediates, and a receptor assay are described.

IT **139419-77-5P 139419-78-6P 139419-90-2P 139419-91-3P 139420-08-9P**

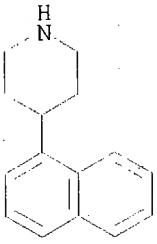
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of, as antihypertensive)

RN 139419-77-5 CAPLUS
CN Piperidine, 1-methyl-4-(1-naphthalenyl)-, hydrobromide (9CI) (CA INDEX NAME)



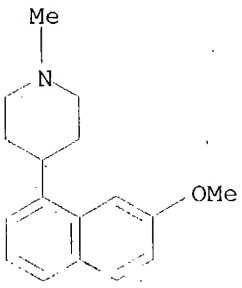
● HBr

RN 139419-78-6 CAPLUS
CN Piperidine, 4-(1-naphthalenyl)-, hydrobromide (9CI) (CA INDEX NAME)

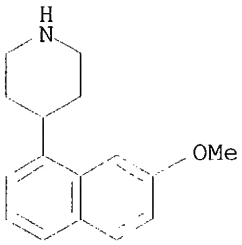


● HBr

RN 139419-90-2 CAPLUS
CN Piperidine, 4-(7-methoxy-1-naphthalenyl)-1-methyl- (9CI) (CA INDEX NAME)

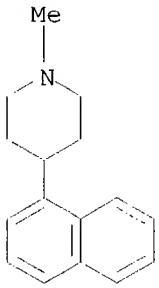


RN 139419-91-3 CAPLUS
CN Piperidine, 4-(7-methoxy-1-naphthalenyl)-, hydrochloride (9CI) (CA INDEX NAME)

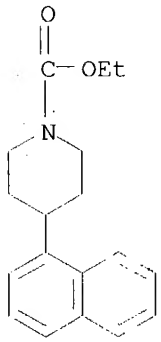


● HCl

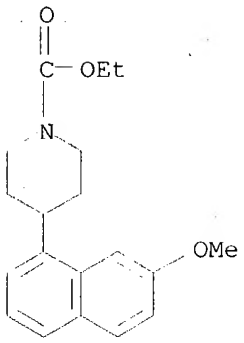
RN 139420-08-9 CAPLUS
CN Piperidine, 1-methyl-4-(1-naphthalenyl)- (9CI) (CA INDEX NAME)



IT **139420-14-7P 139420-22-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as intermediate for antihypertensives)
RN 139420-14-7 CAPLUS
CN 1-Piperidinecarboxylic acid, 4-(1-naphthalenyl)-, ethyl ester (9CI) (CA INDEX NAME)

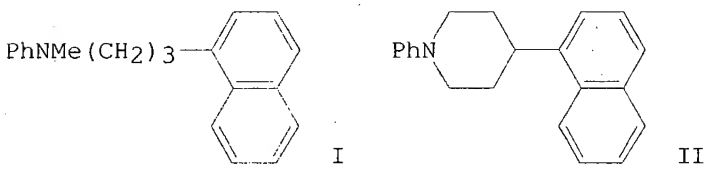


RN 139420-22-7 CAPLUS
CN 1-Piperidinecarboxylic acid, 4-(7-methoxy-1-naphthalenyl)-, ethyl ester (9CI) (CA INDEX NAME)



L13 ANSWER 7 OF 38 CAPLUS COPYRIGHT 1999 ACS
1991:246686 Document No. 114:246686 Comparison of flexibly and rigidly bridged donor-acceptor systems; solvent-induced switching between folded and extended emissive charge-transfer states. Scherer, T.; Willemse, R. J.; Verhoeven, J. W. (Lab. Org. Chem., Univ. Amsterdam, Amsterdam, 1018 WS, Neth.). Recl. Trav. Chim. Pays-Bas, 110(3), 95-6 (English) 1991. CODEN: RTCPA3. ISSN: 0165-0513.

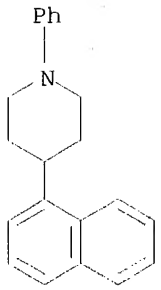
GI



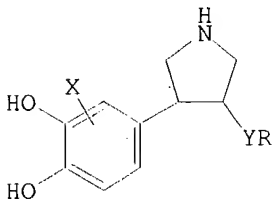
AB The fluorescent properties of a flexibly bridged system (I) were compared with those of a strain-free, semirigidly bridged system (II). For I, in all solvents investigated, a typical broad and structureless exciplex-type emission is obsd. In apolar media II displays emission typical for a donor chromophore, indicating that the electron-transfer quenching mechanism operative in I is either kinetically or thermodn. inaccessible for II. That the latter situation applies is evidenced by the behavior in more polar solvents, where quenching of local fluorescence occurs in II to a degree indistinguishable from I, demonstrating the onset of efficient long-range electron transfer. Further, II displays typical exciplex emission in solvents sufficiently polar to trigger the intramol. electron transfer and this exciplex-like emission occurs at wavelengths similar to those for I in the same solvents.

IT **134142-76-0**
RL: PRP (Properties)
(local and exciplex fluorescence of, solvent effect on)

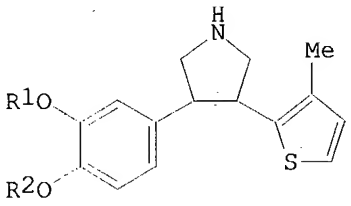
RN 134142-76-0 CAPLUS
CN Piperidine, 4-(1-naphthalenyl)-1-phenyl- (9CI) (CA INDEX NAME)



L13 ANSWER 8 OF 38 CAPLUS COPYRIGHT 1999 ACS
1991:81573 Document No. 114:81573 Preparation of pyrrolidine derivatives as dopamine agonists. Yamanaka, Motosuke; Hoshiko, Tomonori; Suda, Shinji; Yoneda, Naoki; Mori, Nobuyuki; Shino, Mitsumasa; Ishihara, Hiroki; Saito, Mamoru; Matsuoka, Toshiyuki (Eisai Co., Ltd., Japan). Eur. Pat. Appl. EP 381235 A2 19900808, 64 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES,
FR, GB, GR, IT, LI, LU, NL. (English). CODEN: EPXXDW. APPLICATION: EP 90-102102 19900202. PRIORITY: JP 89-25262 19890203; JP 89-254349 19890929.
GI



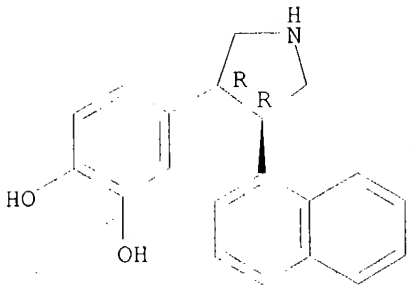
I



II

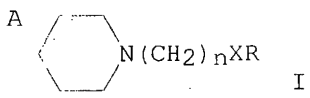
AB The title compds. I [X = H, halo, alkyl; Y = (CH2)n, O, NH, etc.; n = 0-2;
R = (substituted) Ph, naphthyl, heteroaryl] were prepd. A mixt. of pyrrolidine trans-II (R1 = R2 = Me) (prepn. given) and BBr3 in CH2Cl2 was stirred at room temp. for 3 h to give trans-II.HBr (R1 = R2 = H). In an in vitro D1 receptor binding test using the striatum of rats and 3H-Sch23390, the compd. trans-3-(3,4-dihydroxyphenyl)-4-phenylpyrrolidine HBr salt exhibited IC50 of 4.80 .times. 10-6 M; the D2 value was 88 .times. 10-6 M. Addnl. cardiohemodynamic data are given.
IT **131781-78-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as dopamine agonist)
RN 131781-78-7 CAPLUS
CN 1,2-Benzenediol, 4-[4-(1-naphthalenyl)-3-pyrrolidinyl]-, hydrobromide, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

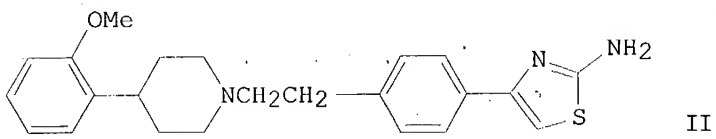


● HBr

L13 ANSWER 9 OF 38 CAPLUS COPYRIGHT 1999 ACS
1990:611852 Document No. 113:211852 Preparation of N-(aralkyl)arylpiperidines and analogs as neuroleptic agents. Nagel, Arthur
Adam (Pfizer Inc., USA). Eur. Pat. Appl. EP 372776 A2 19900613, 16 pp.
DESIGNATED STATES: R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE.
(English). CODEN: EPXXDW. APPLICATION: EP 89-312269 19891127.
PRIORITY:
WO 88-US4300 19881202.
GI



I

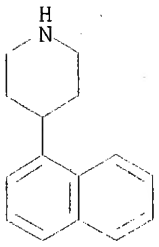


II

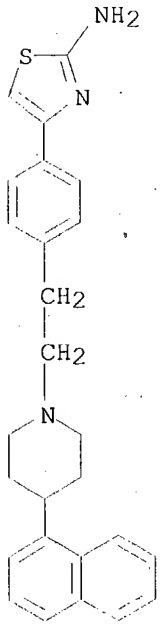
AB The title compds. [I; A = (un)substituted Ph, tolyl, naphthyl; R = tolyl, 5-oxindolyl, 2-amino-5-thiazolylphenyl, 2-methyl-4-oxo-4H-pyrido[1,2a]pyrimidin-3-yl, (un)substituted Ph, etc.; X = O, S, bond; n = 2-4] were prepd. Thus, the Grignard reagent prepd. from 2-BrC6H4OMe was condensed with 1-benzyl-4-piperidone and the product converted in 2 steps to 4-(2-methoxyphenyl)piperidine which was refluxed with 4-[4-(2-chloroethyl)phenyl]-2-aminothiazole in MeCOCH2CHMe2 contg. NaI and Na2CO3 to give title compd. II which had IC50 of 36.3 nM against N-propylnorapomorphine binding at dopamine-2 receptors in vitro.

IT **130305-64-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and reaction of, in prepn. of neuroleptic agents)

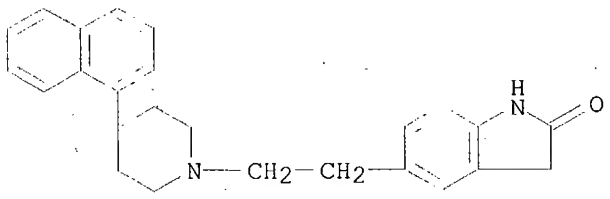
RN 130305-64-5 CAPLUS
CN Piperidine, 4-(1-naphthalenyl)- (9CI) (CA INDEX NAME)



IT **130305-39-4P 130305-41-8P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as neuroleptic agent)
RN 130305-39-4 CAPLUS
CN 2-Thiazolamine, 4-[4-[2-[4-(1-naphthalenyl)-1-piperidinyl]ethyl]phenyl]-
(9CI) (CA INDEX NAME)



RN 130305-41-8 CAPLUS
CN 2H-Indol-2-one,
1,3-dihydro-5-[2-[4-(1-naphthalenyl)-1-piperidinyl]ethyl]-
(9CI) (CA INDEX NAME)



L13 ANSWER 10 OF 38 CAPLUS COPYRIGHT 1999 ACS

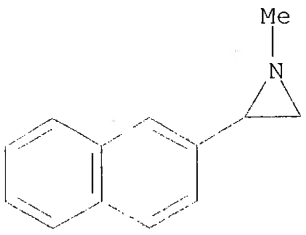
1988:431479 Document No. 109:31479 Cellular glutathione conjugation of aziridines in isolated rat hepatocytes. Hata, Yoshiteru; Watanabe, Masamichi; Tonda, Kanya; Hirata, Masaharu (Shionogi Res. Lab., Shionogi and Co. Ltd., Osaka, 553, Japan). Biochem. Pharmacol., 37(7), 1351-5 (English) 1988. CODEN: BCPCA6. ISSN: 0006-2952.

AB Glutathione (GSH) conjugation of aziridines was found in isolated rat hepatocytes in expts. using the optical isomers of (l- and d-)-aziridinecarboxylic acid (AZC) and (l- and d-)-1-methyl-2-.beta.-naphthylaziridine (NAZ). l-AZC much more effectively consumed glutathione than d-AZC, and the yield of the glutathione conjugate during 2 h of incubation exceeded 200% of the cellular glutathione detected at the initiation of the incubation. Such a high yield of l-AZC-GSH conjugate would occur only when conjugation efficiently proceeds without interference against the GSH resynthesis route in the liver cells. The cytotoxicity of l-AZC was very weak and did not affect cell viability of the isolated hepatocytes even after the formation of AZC-GSH conjugate. Consequently, it is supposed that GSH is not essential for supporting the viability of the isolated hepatocytes. To account for the very slow GSH conjugate formation of d-AZC, the authors envisaged poor membrane transport of the d-isomer resembling the selective incorporation of D- and L-proline obsd. in some plant cells. Both isomers of NAZ were markedly cytotoxic and depressed the cell viability. The yield of the GSH conjugate from NAZ did not exceed the cellular GSH level detected at the initial stage of incubation. The highly cytotoxic compd. nitrosomethane, generated in the 1st biotransformation step of the metab. of NAZ, can obstruct the resynthesis route of GSH by inhibiting the ATP generation process. Decreasing the cellular GSH by treatment with l-AZC enhanced the susceptibility of the isolated hepatocytes to NAZ toxicity. d-AZC did not affect the viability of cells treated with NAZ.

IT **60761-46-8 112457-93-9**
RL: PRP (Properties)
(conjugation of, to glutathione, in liver)

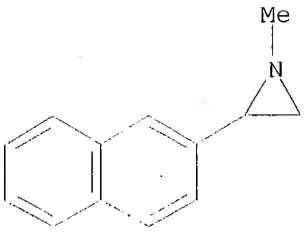
RN 60761-46-8 CAPLUS
CN Aziridine, 1-methyl-2-(2-naphthalenyl)-, (+)- (9CI) (CA INDEX NAME)

Rotation (+).



RN 112457-93-9 CAPLUS
CN Aziridine, 1-methyl-2-(2-naphthalenyl)-, (-)- (9CI) (CA INDEX NAME)

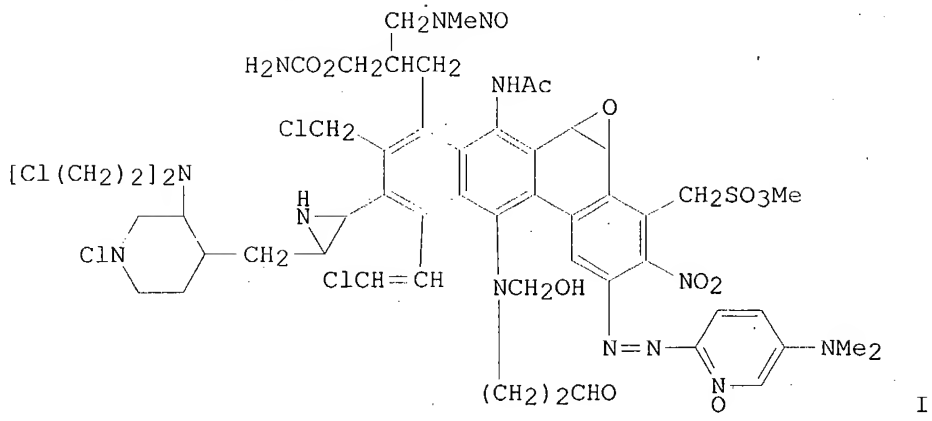
Rotation (-).



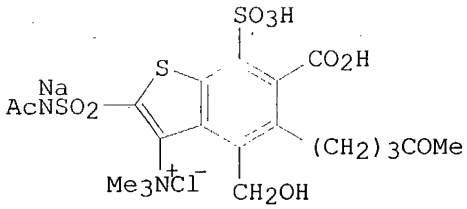
L13 ANSWER 11 OF 38 MEDLINE DUPLICATE 1
88027264 Document Number: 88027264. Aziridine biotransformation by microsomes and lethality to hepatocytes isolated from rat. Hata Y; Watanabe M; Tonda K; Hirata M. (Shionogi Research Laboratories, Shionogi & Co., Ltd., Osaka, Japan..)CHEMICO-BIOLOGICAL INTERACTIONS, (1987) 63 (2) 171-84. Journal code: CYV. ISSN: 0009-2797. Pub. country: Netherlands. Language: English.

AB To clarify the relationship of aziridine biotransformation to their cytotoxic activities, the metabolism of optical isomers of typical cytotoxic and non-cytotoxic aziridines was studied in isolated hepatocytes, rat liver microsomes, mitochondria and L-1210 mouse leukemia cells. Cytotoxic 1-methyl-2-beta-naphthylaziridine (NAZ) gave nitrosomethane as one of the bioactivation products in isolated hepatocytes and simultaneously induced a marked decrease in cellular ATP followed by cell lethality. NAZ itself did not directly affect the respiratory function of mitochondria in isolated hepatocytes or in buffer solution, however, it inhibited the mitochondrial activity in the presence of microsomes in the buffer solution. Nitroso-t-butane or nitrosomethane dimer, used as a substitute for extremely labile nitrosomethane, strongly inhibited the respiration of mitochondria. On the other hand, optical isomers of 2-aziridinecarboxylic acid (AZC) which did not give nitrosomethane in isolated hepatocytes or microsomes also did not show cytotoxicity. Thus, the cytotoxicity of NAZ seems to be induced by bioactivation via cellular oxidases with the nitrosomethane generated being a major toxic component. This may occur with most of the cytotoxic aziridine derivatives.

L13 ANSWER 12 OF 38 CAPLUS COPYRIGHT 1999 ACS
1986:46966 Document No. 104:46966 Fundamental structural alerts to potential carcinogenicity or noncarcinogenicity. Ashby, John (Cent. Toxicol. Lab., Imp. Chem. Ind. PLC, Macclesfield/Cheshire, SK10 4TJ, UK). Environ. Mutagen., 7(6), 919-21 (English) 1985. CODEN: ENMUDM. ISSN: 0192-2521.
GI



I



II

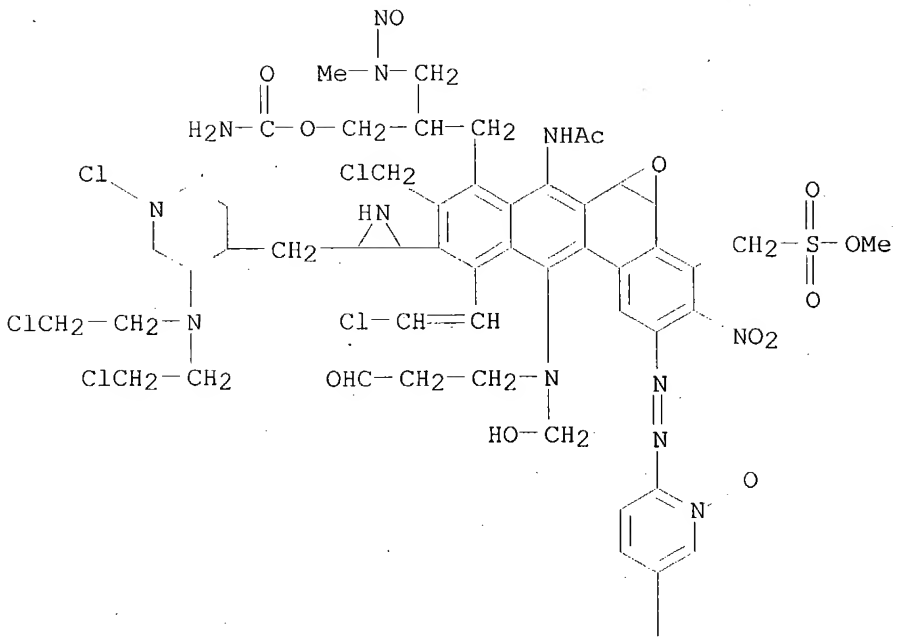
AB Two compds., I [**99779-91-6**] and II [99779-92-7], contg. multiple substructures assocd. with carcinogenicity were presented. These substructures were identified and the compds. discussed in relation to chem. carcinogenicity.

IT **99779-91-6**
RL: BIOL (Biological study)
(as carcinogen, structure and substructure in relation to)

RN 99779-91-6 CAPLUS

CN Benz[3,4]anthra[1,2-b]oxirene-2-methanesulfonic acid, 11-(acetylamino)-10-[2-[[(aminocarbonyl)oxy]methyl]-3-(methylnitrosoamino)propyl]-8-[2-[[3-[bis(2-chloroethyl)amino]-1-chloro-4-piperidinyl]methyl]-2-aziridinyl]-7-(2-chloroethenyl)-9-(chloromethyl)-4-[[5-(dimethylamino)-1-oxido-2-pyridinyl]azo]-1a,11b-dihydro-6-[(hydroxymethyl)(3-oxopropyl)amino]-3-nitro-, methyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



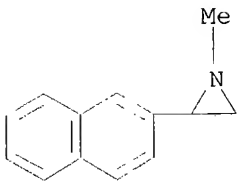
PAGE 2-A

L13 ANSWER 13 OF 38 CAPLUS COPYRIGHT 1999 ACS
1980:597680 Document No. 93:197680 Instrumental and pharmacological paradoxical sleep deprivation in mice: strain differences. Kitahama, K.; Valatx, J. L. (Dep. Med. Exp., Univ. Claude-Bernard, Lyon, 69373/2, Fr.). Neuropharmacology, 19(6), 529-35 (English) 1980. CODEN: NEPHBW. ISSN: 0028-3908.

AB In mice of the inbred strains C57BR, C57BL/6, BALB/c and SEC in which instrumental paradoxical sleep (PS) deprivation was achieved by the water tank method for 10-24 h and in which chlorimipramine [303-49-1], methylnaphthyl aziridine [**28494-15-7**], and nialamide [51-12-7] were used to obtain 6-24 h PS suppression, the PS rebound later obsd. was proportional to the duration of PS deprivation, but different among strains. In BALB/c and SEC mice, pharmacol. deprivation for .ltoreq.24 h did not provoke later PS rebound. A single nialamide injection suppressed PS for .apprx.24 h, but was not followed by later PS rebound in any of the strains.

IT **28494-15-7**
RL: BIOL (Biological study)
(paradoxical sleep deprivation by, genetic differences in)

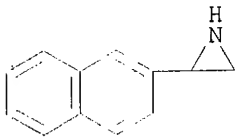
RN 28494-15-7 CAPLUS
CN Aziridine, 1-methyl-2-(2-naphthalenyl)- (9CI) (CA INDEX NAME)



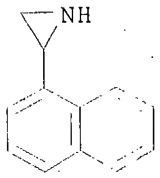
L13 ANSWER 14 OF 38 CAPLUS COPYRIGHT 1999 ACS
1980:57967 Document No. 92:57967 A study of conjugation between an aromatic system and a three membered ring. Castan, Paule; Lopez, Andre; Martino, Robert (Lab. Chim. Coord., Toulouse, 31030, Fr.). Tetrahedron, 35(9), 1093-7 (French) 1979. CODEN: TETRAB. ISSN: 0040-4020.

AB A comparison of calcd. and exptl. magnetic rotatory polarizations of arylaziridines, -cyclopropanes, and -oxiranes indicated that electron delocalization occurs between the arom. group and the 3-membered rings, the degree of conjugation varying with the relative conformation of the 2 groups.

IT **7764-06-9 7764-08-1**
RL: PRP (Properties)
(conjugation in, magnetic rotatory polarization in relation to)
RN 7764-06-9 CAPLUS
CN Aziridine, 2-(2-naphthalenyl)- (9CI) (CA INDEX NAME)



RN 7764-08-1 CAPLUS
CN Aziridine, 2-(1-naphthalenyl)- (9CI) (CA INDEX NAME)



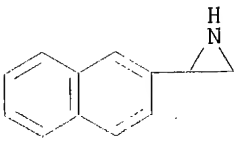
L13 ANSWER 15 OF 38 CAPLUS COPYRIGHT 1999 ACS
1980:180543 Document No. 92:180543 N-Unsubstituted aziridines. Determination of the thermodynamic parameters .DELTA.G0, .DELTA.H0, .DELTA.S0, linked to conformational equilibrium from NMR measurements at high field. Lopez, A.; Gauthier, MM.; Martino, R.; Lattes, A. (Lab. Composes Azotes Polyfonctionnels, Univ. Paul Sabatier, Toulouse, 31077, Fr.). Org. Magn. Reson., 12(7), 418-27 (French) 1979. CODEN: ORMRBD. ISSN: 0030-4921.

AB The distribution of invertomers and thermodn. parameters for conformational inversion of 32 aziridines were detd. by 250 MHz 1H NMR. The steric hindrance of the arom. group and its variation with other aziridine ring substituents was studied for C-arylaziridines. The obsd. hindrance is in agreement with a conjugation phenomenon between the arom.

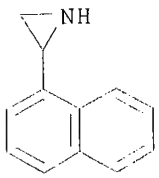
system and the aziridine ring.

IT **7764-06-9 7764-08-1**
RL: PRP (Properties)
(conformational inversion of, potential barrier to, NMR detn. of)

RN 7764-06-9 CAPLUS
CN Aziridine, 2-(2-naphthalenyl)- (9CI) (CA INDEX NAME)

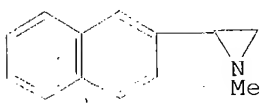


RN 7764-08-1 CAPLUS
CN Aziridine, 2-(1-naphthalenyl)- (9CI) (CA INDEX NAME)

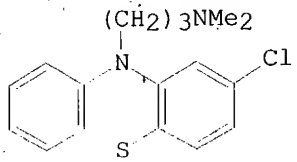


L13 ANSWER 16 OF 38 CAPLUS COPYRIGHT 1999 ACS
1978:590988 Document No. 89:190988 Ceruloplasmin in monkey plasma.
Ikeuchi,
Isao; Amano, Tameyuki (Shionogi Res. Lab., Shionogi and Co., Ltd., Osaka, Japan). Chem. Pharm. Bull., 26(6), 1812-17 (English) 1978. CODEN: CPBTAL. ISSN: 0009-2363.

GI



I



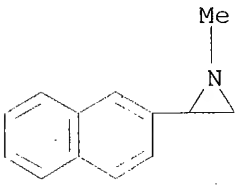
II

AB An abnormally greenish tint appeared in the blood plasma of adult rhesus monkeys that had been daily administered an i.m. injection of 1-methyl-2-(.beta.-naphthyl)aziridine (I) [**28494-15-7**] (2.5 or 7.5 mg/kg/day for 2-4 wk) or chlorpromazine (II) [50-53-3] (3.5 mg/kg/day for 4 wk). This greenish component in the monkey plasma could not be extd. with cyclohexane, 1,2-dichloroethane or n-Bu alc., and the greenish tint was scarcely changed by the addn. of ethylenediaminetetraacetate. The greenish monkey plasma showed a visible absorption band at 610 nm like the blue fraction sepd. from it. These absorption bands at 610 nm, both in the greenish monkey plasma and the sepd. blue fraction, disappeared with the addn. of ascorbic acid and reappeared with O, as with human ceruloplasmin (Cp) [9031-37-2]. The electron spin resonance spectrum of the greenish monkey plasma was similar to that of human Cp. Furthermore,

the major portion of Cu in monkey plasma was in the blue fraction, and the
total plasma Cu and p-phenylenediamine oxidase (PPD) [68009-84-7] activity increased with deepening of the green tint. Thus, the abnormal greenish tint of the monkey plasma is due to the presence of the blue Cu protein Cp in the plasma. Based on examn. of the relation between total plasma Cu and PPD activity in monkey and rat plasma, monkey Cp activity was compared with those of other mammalian species.

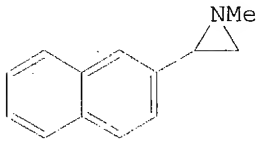
IT **28494-15-7**
RL: BIOL (Biological study)
(ceruloplasmin of blood plasma response to, in monkey)

RN 28494-15-7 CAPLUS
CN Aziridine, 1-methyl-2-(2-naphthalenyl)- (9CI) (CA INDEX NAME)



L13 ANSWER 17 OF 38 CAPLUS COPYRIGHT 1999 ACS
1978:523074 Document No. 89:123074 Drug-induced adrenaline release and blood
glucose in rats: DL-1-methyl-2-(.beta.-naphthyl)-aziridine. Yoshizaki, Toshio; Tonda, Kanya; Kitakaze, Takeshi; Utsumi, Shizuo; Ogawa, Yasunao (Shionogi Res. Lab., Shionogi and Co., Ltd., Osaka, Japan). Jpn. J. Pharmacol., 28(2), 205-11 (English) 1978. CODEN: JJPAAZ. ISSN: 0021-5198.

GI



I

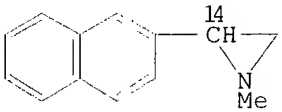
AB Although there was no elevation of blood glucose, a decrease of liver glycogen [9005-79-2] was detected after an s.c. injection of 250059-S (I)
[**60761-47-9**] (5 or 25 mg/kg) in rats. A marked decrease of adrenaline [51-43-4] content in the adrenal gland was obsd. 2 h after 50 mg I/kg. This result is consistent with the marked adrenaline secretion from the adrenal gland into adrenal-venous blood after injection of >25 mg/kg. In splanchnicotomized rats, however, I-induced adrenaline release was not clearly obsd. Pretreatment with I prevented adrenaline-induced hyperglycemia. I at 10 and 25 mg/kg, elevated the plasma insulin level to
about twice that of the control. The I-induced depletion of liver glycogen was not completely blocked by adrenal demedullation, although it completely disappeared with pretreatment with 10 mg/kg of propranolol. Thus, I causes hypersection of adrenaline from the adrenal glands through excitation of the splanchnic nerves, though it causes no elevation of blood glucose, mainly because of its direct or indirect blocking action on

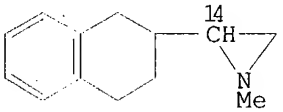
adrenaline hyperglycemia.
IT **60761-47-9**
RL: BIOL (Biological study)
(adrenaline release and blood glucose response to)
RN 60761-47-9 CAPLUS

L13 ANSWER 18 OF 38 BIOSIS COPYRIGHT 1999 BIOSIS
1979:882 Document No.: BR16:882. EFFECT OF 1 METHYL-2-2-NAPHTHYL AZIRIDINE INDUCED SUPPRESSION OF PARADOXICAL SLEEP ON AMYGDALOID KINDLING. LEVIEL V;
BEILLEVAIRE T. Electroencephalogr. Clin. Neurophysiol., (1977) 43 (4), 556. CODEN: ECNEAZ. ISSN: 0013-4694. Language: Unavailable.

L13 ANSWER 19 OF 38 BIOSIS COPYRIGHT 1999 BIOSIS
1978:26546 Document No.: BR14:26546. PRELIMINARY STUDY OF THE COMPARATIVE ACTION OF 1 METHYL-2 2-NAPHTHYL AZIRIDINE ON KINDLING EFFECT AND ON PARADOXICAL SLEEP. LEVIEL V; BEILLEVAIRE T; NAQUET R. Rev. Électroencephalogr. Neurophysiol. Clin., (1977) 7 (2), 225-231. CODEN: RENCBH. ISSN: 0370-4475. Language: Unavailable.

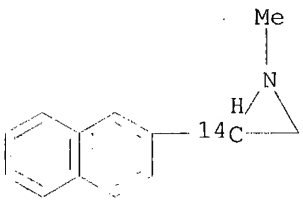
L13 ANSWER 20 OF 38 CAPLUS COPYRIGHT 1999 ACS DUPLICATE 2
1977:422892 Document No. 87:22892 Synthesis of some 14C-labeled aziridine compounds, psychotropic agents. Minato, H.; Nagasaki, T.; Katsuyama, Y.; Yokoshima, T.; Suga, K.; Ueda, T. (Res. Lab., Shionogi and Co., Osaka, Japan). J. Labelled Compd. Radiopharm., 13(1), 103-11 (English) 1977. CODEN: JLCRD4.
GI



I


II

AB The aziridine derivs. I and II, psychotropic agents, were prepd. in 4 and 5 steps from 2-acetylnaphthalene-.alpha.-14C in 32.4% and 14.4% radiochem.
yields and having 8.18 and 1.72 mCi/mmol specific activity, resp.
IT **63335-63-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 63335-63-7 CAPLUS
CN Aziridine-14C, 1-methyl-2-(2-naphthalenyl)- (9CI) (CA INDEX NAME)



L13 ANSWER 21 OF 38 CAPLUS COPYRIGHT 1999 ACS
1976:554890 Document No. 85:154890 Fragmentation reaction of ylide. 5. A new metabolic reaction of aziridine derivatives. Hata, Y.; Watanabe, M.; Matsubara, T.; Touchi, A. (Shionogi Res. Lab., Shionogi and Co., Ltd.,

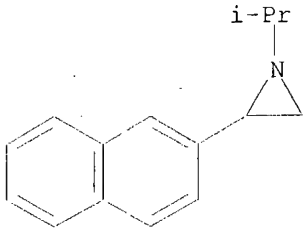
Osaka, Japan). J. Am. Chem. Soc., 98(19), 6033-6 (English) 1976. CODEN: JACSAT.

AB Reactions of a no. of substituted aziridines with rat liver microsomes under in vitro condition were carried out. Most of the aziridines employed gave olefin and nitrosoalkane as the fragmentation reaction products of the aziridine ring. This is a new metabolic reaction of aziridine, which has been discussed as an alkylating reagent or a precursor of amino alc. formation in vivo. The fragmentation reaction of aziridine with enzyme(s) should be important in discussions on the biol. character of aziridines hereafter.

IT **60723-25-3 60723-26-4 60761-46-8 60761-47-9**
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(metab. of, by liver microsomes)

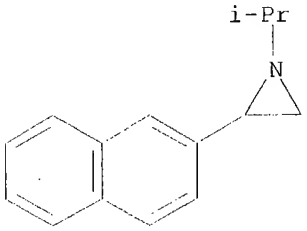
RN 60723-25-3 CAPLUS
CN Aziridine, 1-(1-methylethyl)-2-(2-naphthalenyl)-, (-)- (9CI) (CA INDEX NAME)

Rotation (-).



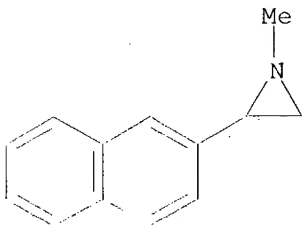
RN 60723-26-4 CAPLUS
CN Aziridine, 1-(1-methylethyl)-2-(2-naphthalenyl)-, (+)- (9CI) (CA INDEX NAME)

Rotation (+).



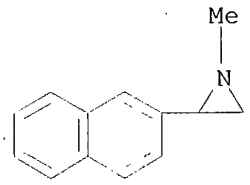
RN 60761-46-8 CAPLUS
CN Aziridine, 1-methyl-2-(2-naphthalenyl)-, (+)- (9CI) (CA INDEX NAME)

Rotation (+).



RN 60761-47-9 CAPLUS

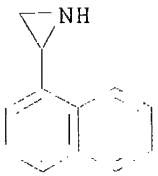
L13 ANSWER 22 OF 38 CAPLUS COPYRIGHT 1999 ACS DUPLICATE 3
1977:100679 Document No. 86:100679 Microdetermination of 1-methyl-2-(2-naphthyl)aziridine in biological materials. Sakano, Toshiyuki; Yamaji, Akiko; Hirauchi, Kazumasa; Amano, Tameyuki (Res. Lab., Shionogi and Co., Ltd., Osaka, Japan). Yakugaku Zasshi, 96(12), 1426-31 (Japanese) 1976. CODEN: YKKZAJ.
GI For diagram(s), see printed CA Issue.
AB A fluorometric method was developed for the quant. of 1-methyl-2-(2-naphthyl)aziridine (I) [**28494-15-7**] in biol. materials. A three-phase thin-layer plate (Silica gel G, cellulose powder, and talc) was effective for the sepn. and fluorescence measurement of I. I in rat muscle or in rat blood was extd. with AcOEt and n-hexane, resp., and then 2-10 .mu.L of the ext. was spotted on the silica gel phase of the 3-phase thin-layer plate. The plate was developed for 40 min with MeOH-ether (7:1, v/v) mixt., dried, and then sprayed with isopropyl myristate. The Rf-value of I was .apprx.0.5 in the talc phase of the 3-phase plate. The plate was heated for 20 min on a hot plate (180.degree.) and cooled in N2 stream. Fluorescence intensity was detd. by scanning with a spectrofluorodensitometer (excit. 340 nm, emission 480 nm) after the fluorescent spot was covered with a quartz plate. The range of I was 0.02-0.2 .mu.g/spot. Using this method, unchanged I was detd. in rat blood and muscle. 2-Vinylnaphthalene [827-54-3] was the metabolite of I in rat blood.
IT **28494-15-7**
RL: ANT (Analyte); ANST (Analytical study)
(detn. of, in biol. materials)
RN 28494-15-7 CAPLUS
CN Aziridine, 1-methyl-2-(2-naphthalenyl)- (9CI) (CA INDEX NAME)



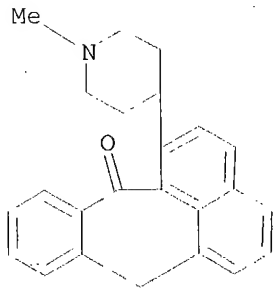
L13 ANSWER 23 OF 38 BIOSIS COPYRIGHT 1999 BIOSIS
1976:58915 Document No.: BR12:58915. BRAIN FUNCTION AND BIOGENIC AMINES PART 4
ROLE OF MONO AMINERGIC MECHANISM ON SELECTIVE INHIBITION OF PARADOXICAL SLEEP. YAMAMOTO K-I; HIROSE K; NAITO Y; YOSHIZAKI T; KUROSAWA A; OGAWA Y; OKA M. Jpn. J. Pharmacol., (1975 (RECD 1976)) 25 (SUPPL), 82P. CODEN: JJPAAZ. ISSN: 0021-5198. Language: Unavailable.

L13 ANSWER 24 OF 38 CAPLUS COPYRIGHT 1999 ACS
1974:535835 Document No. 81:135835 Synthesis of aziridines by reduction of oximes and O-alkyl oximes with sodium dihydrobis(2-methoxyethoxy)aluminate. Landor, Stephen R.; Sonola, Obuntunji O.; Tatchell, Austin R. (Makerere Univ., Kampala, Uganda). J. Chem. Soc., Perkin Trans. 1 (11), 1294-9 (English) 1974. CODEN: JCPRB4.
AB The title redn. of aryl ketoximes and their O-Me and O-tetrahydropyranyl derivs. in THF gave aziridines and primary and secondary amines. The stereochem. and mechanism of the reaction were discussed.
IT **7764-08-1P**

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 7764-08-1 CAPLUS
CN Aziridine, 2-(1-naphthalenyl)- (9CI) (CA INDEX NAME)



L13 ANSWER 25 OF 38 CAPLUS COPYRIGHT 1999 ACS
1972:526332 Document No. 77:126332 6-[3-(dialkylamino) propyl]-7(12H)-pleiadenones. Kaiser, Carl; Zirkle, Charles L. (Smith Kline and French Laboratories). U.S. US 3681461 19720801, 7 pp. (English). CODEN: USXXAM. APPLICATION: US 68-709863 19680304.
GI For diagram(s), see printed CA Issue.
AB 7,12-Dihydropleiadenes [I, e.g. R = Me2N(CH2)3, 3-(4-methyl-1-piperazinyl)propyl, or Me2NCH2CHMeCH2, R1 = H or Cl], useful tranquilizers and antidepressants, were prepared by reaction of the appropriate amino Grignard with a 7(12H)pleiadenone, followed by acid dehydration of the 7-hydroxy intermediate and redn. of the unsatd. deriv. with P-HI. The pleiadenones II [R = Me2N(CH2)3 and 1-methyl-4-piperidyl] obtained as 1,4-addn. products in the Grignard reaction were also tranquilizers and antidepressants.
IT **31878-13-4P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 31878-13-4 CAPLUS
CN 7(12H)-Pleiadenone, 6-(1-methyl-4-piperidinyl)-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

L13 ANSWER 26 OF 38 CAPLUS COPYRIGHT 1999 ACS
1972:564323 Document No. 77:164323 Substituted 7,12-dihydropleiadene derivatives. Kaiser, Carl; Zirkle, Charles L. (Smith Kline and French Laboratories). U.S. US 3673176 19720627, 6 pp. Division of U.S. 3,557,098

(CA 74;141406b). (English). CODEN: USXXAM. APPLICATION: US 68-709863 19680304.

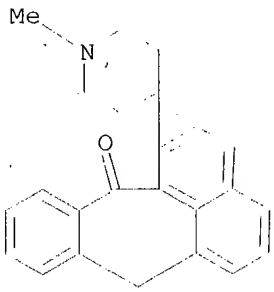
GI For diagram(s), see printed CA Issue.

AB The dihydropleiadenes [I, R = (CH2)3NMe2, 3-(4-methylpiperazino)propyl, CH2CHMeCH2-NMe2, 3-[4-(2-hydroxyethyl)piperazino]propyl, 4-piperidinyl, 1-cyclopropylmethyl-4-piperidinyl, 2-(1-methyl-2-piperidinyl)-ethyl, 2-(1-methyl-2-pyrrolidinyl)ethyl; R2 = H, Cl]were prepd. by treating the 7-pleiadenone with the Grignard of the amide to give the 7-hydroxy deriv., which was dehydrated to the olefin, and reduced to I. The piperidylidenepleiadenes II (R2 = Pr, allyl, CH2CH2OH, cyclopropylcarbonyl) were similarly prepd. III (R = (CH2)3NMe2, N-methyl-4-piperidyl) were obtained as byproducts. I-III were tranquilizing and antidepressant in rats at 50-200 mg/kg orally.

IT **31878-13-4P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 31878-13-4 CAPLUS

CN 7(12H)-Pleiadenone, 6-(1-methyl-4-piperidinyl)-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

L13 ANSWER 27 OF 38 CAPLUS COPYRIGHT 1999 ACS

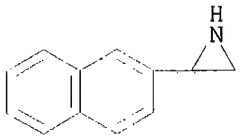
1972:419513 Document No. 77:19513 Aziridine compounds. Yatsuda, Hiroshi; Kotera, Katsumi (Shionogi and Co., Ltd.). Japan. JP 47013499 B4 19720424 Showa, 5 pp. (Japanese). CODEN: JAXXAD. APPLICATION: JP 68-60696 19680823.

AB Hydroxyimino compds. were reduced with LiAlH4 in an inert solvent in the presence of an amine to give aziridine derivs. E.g., 1-phenyl-2-(hydroxyimino)propane was heated 4 hr at 60.degree. in a sealed tube with LiAlH4, BuMeNH, and THF to give 70% cis-2-methyl-3-phenylaziridine. Among 6 more compds. similarly manufd. were the following: 73% 2-(2-naphthyl)-aziridine; 82% 2-phenylaziridine; 50% 5,6-imino-5,6,7,8-tetrahydrodibenzo[a,c]cyclooctene; 60% 1,2-iminotetralin; 35.5% 2,6-di-(2-aziridinyl)naphthalene.

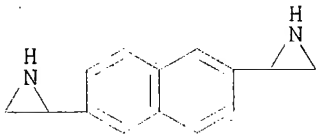
IT **7764-06-9P 36686-57-4P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 7764-06-9 CAPLUS

CN Aziridine, 2-(2-naphthalenyl)- (9CI) (CA INDEX NAME)



RN 36686-57-4 CAPLUS
CN Aziridine, 2,2'-(2,6-naphthalenediyl)bis- (9CI) (CA INDEX NAME)

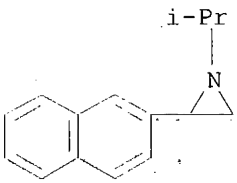


L13 ANSWER 28 OF 38 CAPLUS COPYRIGHT 1999 ACS
1973:15310 Document No. 78:15310 Aziridines related to .beta.-adrenergic blocking agents. Kinetics of formation and reaction, and unusual salt effects. Cockayne, G. A.; Taylor, P. J. (Pharm. Div., Imp. Chem. Ind. Ltd., Macclesfield, Engl.). J. Chem. Soc., Perkin Trans. 2 (14), 2173-80 (English) 1972. CODEN: JCPKBH.

AB The kinetics and activation parameters of the cyclization of .beta.-chloroethylamine derivs. were detd. and used to demonstrate mechanistic differences between those cyclizations that can, and those that cannot, obtain assistance from benzylic or neighboring aryl participation. The reactions of aziridines with H2O and thiosulfate were studied. Activation parameters were a better indication than product analyses of the mechanism (SN2 or SN1) or aziridine decompn. Activity coeffs. were extd. for the transition states of ring closure of RCH2CHClCH2NHCHMe2 (R = 1-naphthyloxy) and RCHClCH2NHCHMe2 (R = 2-naphthyl) to the corresponding aziridines and of their subsequent ring opening reactions. Large, specific salt effects were obsd. for some ring closures and cleavages; their transition states were discussed in terms of these effects.

IT **1083-35-8**
RL: PEP (Physical, engineering or chemical process); PRP (Properties); RCT (Reactant); PROC (Process)
(hydrolysis of, kinetics and mechanism of)

RN 1083-35-8 CAPLUS
CN Aziridine, 1-(1-methylethyl)-2-(2-naphthalenyl)- (9CI) (CA INDEX NAME)



L13 ANSWER 29 OF 38 CAPLUS COPYRIGHT 1999 ACS
1973:111717 Document No. 78:111717 Stereoselective synthesis of threo- and erythro-(.beta.-naphthyl)serines and erythro-(.beta.-naphthyl)isoserines.

Jain, Padam C.; Belleau, B. (Div. Med. Chem., Cent. Drug Res. Inst., Lucknow, India). Indian J. Chem., 10(10), 973-6 (English) 1972. CODEN: IJOCAP.

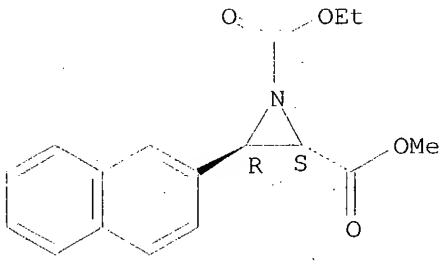
AB threo-3-(.beta.-Naphthyl)serine has been synthesized by the reaction of .beta.-naphthaldehyde with glycine in the presence of NaOH, while the erythro-isomer (I) has been prepared starting from trans-3-(.beta.-naphthyl) acrylic acid Me ester, which is converted to trans-2(.beta.-naphthyl)-3- methoxycarbonyl-1-ethoxycarbonylaziridine (II) by reaction with iodine isocyanate followed by treatment with EtOH and NaH. Treatment of II with AcOH-Ac2O, followed by deacylation, gives I. Treatment of Me trans-2-(.beta.-naphthyl)glycidate with NaN3, followed by hydrogenation, gives erythro-3(.beta.-naphthyl)isoserine Me ester. theo-(.beta.-Naphathyl)serine shows high in vitro antibacterial activity but is inactive in vivo.

IT **40204-58-8P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 40204-58-8 CAPLUS

CN 1,2-Aziridinedicarboxylic acid, 3-(2-naphthalenyl)-, 1-ethyl 2-methyl ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.



L13 ANSWER 30 OF 38 CAPLUS COPYRIGHT 1999 ACS

1971:141406 Document No. 74:141406 Substituted 7,12-dihydropleiadene derivatives, useful as tranquilizers and antidepressants. Kaiser, Carl; Zirkle, Charles L. (Smith Kline and French Laboratories). U.S. US 3557098 19710119, 5 pp. (English). CODEN: USXXAM. APPLICATION: US 19680304.

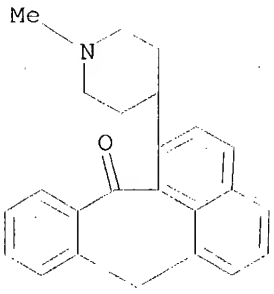
GI For diagram(s), see printed CA Issue.

AB The title compds. (e.g., I) were prepd. by reaction of 7-(12H)-pleiadenones with amino Grignard reagents, followed by acid dehydration of the 7-hydroxy intermediate and redn. of the unsatd. product with P-HI. Thus, Me2N(CH2)3MgCl and 7-(12H)-pleiadenone refluxed in THF gave 7-[3-(dimethylamino)-propyl]-7,12-dihydro-7-hydroxypleiadene (II) and the 1,4-addn. product (III). II with HCl-MeOH gave 7-[3-(dimethylamino)propylidene]-7,12-dihydropleiadene, which was reduced with P-HI to give I. Seventeen examples were given. I were antidepressants and tranquilizers.

IT **31878-13-4P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

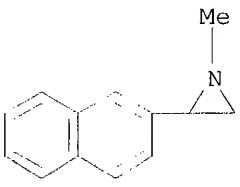
RN 31878-13-4 CAPLUS

CN 7(12H)-Pleiadenone, 6-(1-methyl-4-piperidinyl)-, hydrochloride (9CI) (CA INDEX NAME)

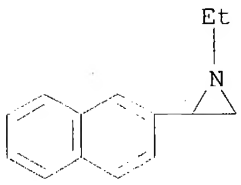


● HCl

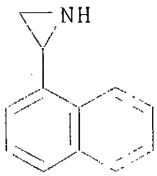
L13 ANSWER 31 OF 38 CAPLUS COPYRIGHT 1999 ACS
1970:466407 Document No. 73:66407 Tranquilizing and antidepressive 1-alkyl-2-(2-naphthyl)aziridines. Kodera, Katsumi; Kitahonoki, Keizo; Kido, Ryonosuke (Shionogi and Co., Ltd.). Ger. Offen. DE 2003839 19700730, 20 pp. (German). CODEN: GWXXBX. PRIORITY: JP 19690128.
GI For diagram(s), see printed CA Issue.
AB The pharmaceutical title compds. (I) were prepd. from the corresponding N-alkylaminoethanol by chlorination or sulfonation and cyclization with a base or by N-alkylation of I (R = H) with a trialkyloxoniumfluoroborate. Thus, SOCl2 was added to II (R1 = OH, R2 = NHMe) in CHCl3 with cooling and the mixt. stirred 4 hr at room temp. to give II.HCl (R1 = Cl, R2 = NHMe), which was refluxed 2 hr with KOH-MeOH to yield I (R = Me)(Ia). Similarly prepd. were I R = Et, CH2:CHCH2, Me2N(CH2)3, and iso-Pr%. Ia had LD50 268 mg/kg in mice s.c. and strongly increased tranquilizing activity as compared, e.g., to chloropromazine.
IT **28494-15-7P 28531-12-6P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 28494-15-7 CAPLUS
CN Aziridine, 1-methyl-2-(2-naphthalenyl)- (9CI) (CA INDEX NAME)



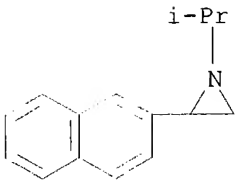
RN 28531-12-6 CAPLUS
CN Aziridine, 1-ethyl-2-(2-naphthyl)- (8CI) (CA INDEX NAME)



L13 ANSWER 32 OF 38 CAPLUS COPYRIGHT 1999 ACS
1971:3147 Document No. 74:3147 NMR studies of aliphatic nitrogen-containing compounds. X. Stereospecific geminal nitrogen-15, hydrogen coupling constants in 2-(.alpha.-naphthyl)aziridine-15N. Otsuru, Masako; Tori, Kazuo (Shionogi Res. Lab., Shionogi and Co., Ltd., Osaka, Japan). Tetrahedron Lett. (47), 4043-5 (English) 1970. CODEN: TELEAY.
GI For diagram(s), see printed CA Issue.
AB The abs. J15N,HC values for the title compd. (I) are higher than the J15N,HB values; the effect of the electroneg. 1-C10H7 group is discussed. Coupling consts. are obtained in CDCl3, C6D6, CD3CN, and (CD3)2SO, and J15N,HA values are also given.
IT **7764-08-1**
RL: PRP (Properties)
(nuclear spin-spin coupling consts. in)
RN 7764-08-1 CAPLUS
CN Aziridine, 2-(1-naphthalenyl)- (9CI) (CA INDEX NAME)



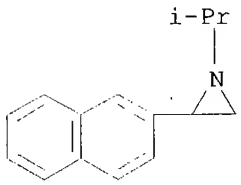
L13 ANSWER 33 OF 38 CAPLUS COPYRIGHT 1999 ACS
1970:132358 Document No. 72:132358 .beta.-Adrenergic blocking agents. VIII.
Reactions of .beta.-haloalkylamines related to pronethalol and propranolol. Howe, Ralph (Pharm. Div., Imp. Chem. Ind., Ltd., Macclesfield, Engl.). J. Med. Chem., 13(3), 398-403 (English) 1970. CODEN: JMCMAR.
AB Some .beta.-haloalkylamines related to pronethalol and propranolol were prepd. Those of the pronethalol series are hydrolyzed in vitro and in vivo to the corresponding .beta.-hydroxyalkylamines, and are .beta.-adrenergic blocking agents. The .beta.-chloroalkylamine related to propranolol is not a .beta.-adrenergic blocking agent. It is hydrolyzed with difficulty in vitro to give mainly a position isomer of propranolol which is not a .beta.-adrenergic blocking agent. Pronethalol analogs having SH, NH2, NHMe, and OMe in place of the OH group are much less potent as .beta.-adrenergic blocking agents. Replacement of the ethereal O atom of propranolol by CH2 markedly reduces blocking potency.
IT **1083-35-8P 27827-10-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 1083-35-8 CAPLUS
CN Aziridine, 1-(1-methylethyl)-2-(2-naphthalenyl)- (9CI) (CA INDEX NAME)



RN 27827-10-7 CAPLUS
CN Aziridine, 1-isopropyl-2-(2-naphthyl)-, monopicrate (8CI) (CA INDEX NAME)

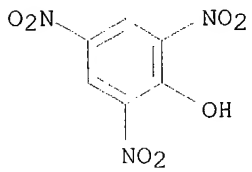
CM 1

CRN 1083-35-8
CMF C15 H17 N



CM 2

CRN 88-89-1
CMF C6 H3 N3 O7

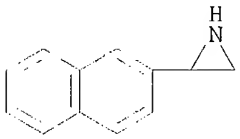


L13 ANSWER 34 OF 38 CAPLUS COPYRIGHT 1999 ACS
1969:438948 Document No. 71:38948 Aziridines. Kotera, Katsumi; Kitaraki, Keizo (Shionogi and Co., Ltd.). Japan. JP 44000212 B4 19690108 Showa, 4 pp. (Japanese). CODEN: JAXXAD. APPLICATION: JP 19650813.
AB To 1.10 g. LiAlH4 suspended in 25 ml. dry tetrahydrofuran (THF) is added with stirring 1 g. 1-phenyl-2-hydroxyiminoethane in 20 ml. dry THF at room temp. in 20 min., the mixt. refluxed with stirring 3 hrs., a small amt. of H2O added, filtered, the ppt. washed with Et2O and C6H6, and the filtrate dried with anhyd. Na2SO4 to give 846 mg. oily 2-phenylaziridine (I), b10 90.5-3.degree.. To 423 mg. I at -30.degree. is added 1.07 g. CS2, the temp. brought to room temp., and the mixt. heated in a sealed tube on a boiling water bath 6 hrs. Basifying with 5% NaOh and Et2O extn. gives 40 mg. N,N-bis(phenethyl)thiourea, m. 89-92.degree. (C6H6-hexane). The 5%

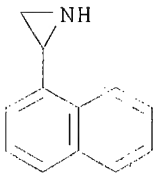
NaOH layer is made acid with 10% HCl to deposit 248 mg. 5-phenyltiazolidine-2-tione, m. 165-9.degree. (MeOH). Similarly prepd. are N,N'-bis(4-methoxyphenethyl)thiourea, m. 123-4.degree., and 5-(4-methoxyphenyl)thiazolidine-2-thione, m. 139-40.degree.; and N,N'-bis-(4chlorophenethyl)thiourea, m. 119-20.degree., and 5-(4-chlorophenyl)thiazolidine-2-thione, m. 157-8.degree.. .alpha.-Naphthyl-acetaldehyde oxime (500 mg.) is added to 200 mg. LiAlH4 in 20 ml. dry THF, the mixt. refluxed 3 hrs., a small mat. of H2O added, filtered, and the dried filtrate subjected to Al2O3 chromatog. in C6H6 to give 93 mg. 2-(.alpha.-naphthyl)aziridine (II), m. 64-5.degree. (hexane-Et2O). A C6H6-CHCl3 (5:1 to 1:1) eluate (112 mg.) is treated with HCl to give 52 mg. 2-(.alpha.-naphthyl)ethylamine-HCl, m. 243-8.degree.. Treatment of II with phenyl isocyanate and with CS2 affords 1-phenylcarbamoyl-2-(.alpha.-naphthyl)aziridine, m. 133.5-5.degree. (Et2O) and 5-(.alpha.-naphthyl)-2-thiazolidinethione, m. 237-40.degree. (C6H6), resp. Similarly is prepd. 1-phenylcarbamoyl-2-(.beta.-naphthyl)aziridine, m. 145-6.degree., and 2-(.beta.-naphthyl)aziridine, b5 135-55.degree., m. 101-2.degree..

IT **7764-06-9P 7764-08-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 7764-06-9 CAPLUS
CN Aziridine, 2-(2-naphthalenyl)- (9CI) (CA INDEX NAME)



RN 7764-08-1 CAPLUS
CN Aziridine, 2-(1-naphthalenyl)- (9CI) (CA INDEX NAME)

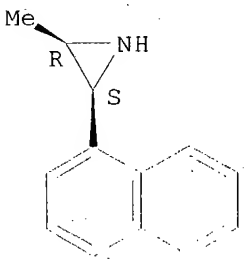


L13 ANSWER 35 OF 38 CAPLUS COPYRIGHT 1999 ACS
1968:467158 Document No. 69:67158 Stereochemistry of aziridine formation by reduction of oximes with lithium aluminum hydride on aralkyl alkyl ketoximes and their tosylates. Kotera, K.; Okada, T.; Miyazaki, S. (Shionogi Res. Lab., Shionogi and Co., Ltd., Osaka, Japan). Tetrahedron, 24(16), 5677-90 (English) 1968. CODEN: TETRAB.

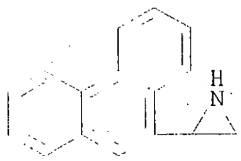
AB Sepn. of syn- and anti-isomers of aralkyl alkyl ketoximes and their tosylates was carried out using 1-phenylpropan-2-one and 1-.alpha.-naphthylpropan-2-one. With the established configurations, LiAlH4 redn. of the oximes and their tosylates was performed and the products were analyzed by gas-liq. chromatog. The results clearly indicate that aziridine formation is strongly influenced by the configurations of the oximes and the oxime tosylates used. 23 references.

IT **16519-73-6P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 16519-73-6 CAPLUS
CN Aziridine, 2-methyl-3-(1-naphthyl)-, cis- (8CI) (CA INDEX NAME)

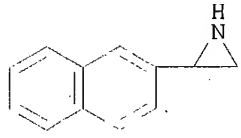
Relative stereochemistry.



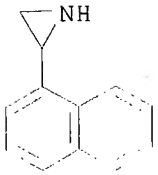
L13 ANSWER 36 OF 38 CAPLUS COPYRIGHT 1999 ACS
1968:114306 Document No. 68:114306 Aziridine formation by lithium aluminum hydride reduction of oximes. Kotera, Katsumi; Miyazaki, Sadao; Takashi, Hiromi; Okada, Tetsuo; Kitahonoki, Keizo (Shionogi Res. Lab., Shionogi and Co. Ltd., Osaka, Japan). Tetrahedron, 24(9), 3681-96 (English) 1968. CODEN: TETRAB.
AB Aziridine formation by LiAlH4 redn. of oximes was extended to compd. types such as ArCH2C(:NOH)R, ArC(:NOH)R, ArCHC(:NOH)R', and ArCH2C(:NOH)H. The results were satisfactory for generalization of this reaction. 29 references.
IT **7763-72-6P 7764-06-9P 7764-08-1P**
18152-50-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 7763-72-6 CAPLUS
CN Aziridine, 2-(9-phenanthrenyl)- (9CI) (CA INDEX NAME)



RN 7764-06-9 CAPLUS
CN Aziridine, 2-(2-naphthalenyl)- (9CI) (CA INDEX NAME)

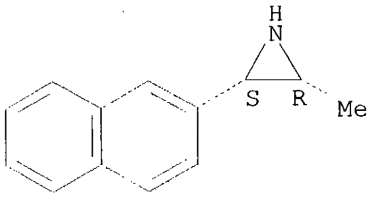


RN 7764-08-1 CAPLUS
CN Aziridine, 2-(1-naphthalenyl)- (9CI) (CA INDEX NAME)



RN 18152-50-6 CAPLUS
CN Aziridine, 2-methyl-3-(2-naphthyl)-, cis- (8CI) (CA INDEX NAME)

Relative stereochemistry.

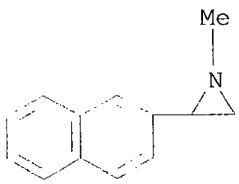


L13 ANSWER 37 OF 38 CAPLUS COPYRIGHT 1999 ACS
1968:472655 Document No. 69:72655 Proton magnetic resonance studies of N-substituted styrenimines. IX. N.M.R. studies of aliphatic nitrogen-containing compounds. Ohtsuru, Masako; Tori, Kazuo (Shionogi Res. Lab., Shionogi and Co., Ltd., Osaka, Japan). J. Mol. Spectrosc., 27(1-4), 296-303 (English) 1968. CODEN: JMOSA3.

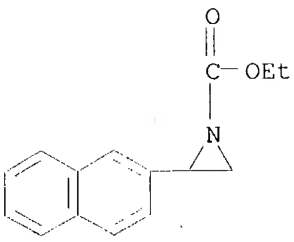
AB 1H N.M.R. spectra of styrenimine and its derivs. were investigated. The assignment of signals of aziridine ring protons was carried out by the proton magnetic double resonance technique at 100 MHz. to make full analyses of the spectra. Coupling consts. of geminal protons in the ring are correlated with the electronegativity of N-substituents; the correlation shows a pos. trend. Long-range spin couplings between the N-methyl and ring protons are stronger when they are cis than when trans: the sign of the coupling const. in the former case is conjectured to be neg. The stereospecific 14N-C-H coupling is also discussed in connection with the orientation of the lone pair on N. 19 references.

IT **21399-78-0 21408-62-8 21441-74-7**
RL: PRP (Properties)
(nuclear magnetic resonance of, electron configuration in relation to)

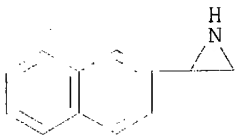
RN 21399-78-0 CAPLUS
CN Aziridine, 1-methyl-2-(2-naphthalenyl)-, trans- (9CI) (CA INDEX NAME)



RN 21408-62-8 CAPLUS
CN 1-Aziridinecarboxylic acid, 2-(2-naphthyl)-, ethyl ester, trans- (8CI) (CA INDEX NAME)

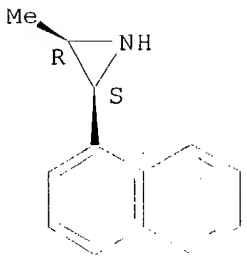


RN 21441-74-7 CAPLUS
CN Aziridine, 2-(2-naphthyl)-, trans- (8CI) (CA INDEX NAME)



L13 ANSWER 38 OF 38 CAPLUS COPYRIGHT 1999 ACS
1967:402648 Document No. 67:2648 Stereochemistry of aziridine formation by lithium aluminum hydride reduction of oximes. Kotera, Katsumi; Okada, Tetsuo; Miyazaki, Sadao (Shionogi Co., Osaka, Japan). Tetrahedron Lett. (9), 841-4 (English) 1967. CODEN: TELEAY.
GI For diagram(s), see printed CA Issue.
AB Pure cryst. anti-1-phenylpropan-2-one oxime (I, 300 mg., m. 62-3.degree.) refluxed 2 hrs. in 10 ml. tetrahydrofuran with 2.2 molar equivs. of LiAlH4 and the product mixt. analyzed by gas-liquid chromatog. gave 4.7% cis-2-phenyl-3-methylaziridine (II, R = Ph) (III), 18% aziridine (IV, R = Ph) (V) and 65% primary amine RCH2CH(NH2)Me (VI, R = Ph) (VII). Redn. of 5 .apprx.7:1 anti-syn-I under the same conditions gave 13% III, 13% V, and 56% VII whereas 2 .apprx.3:1 anti-syn-I yielded 23% III, 8.8% V, and 56% VII. The isolation of the pure anti isomer of 1-.alpha.-naphthylpropan-2-one oxime (VIII), m. 96-7.degree., permitted similar redns. The detn. of configurations and the quant. analyses of anti- and syn-VIII were based on the recorded N.M.R. data. Pure anti-VIII (150 mg.) refluxed 3 hrs. in 5 ml. tetrahydrofuran with 75 mg. LiAlH4 gave 15.2% II (R = .alpha.-C10H7) (IX), 28.9% IV (R = .alpha.-C10H7) (X), and 53.5% VI (R = .alpha.-C10H7) (XI). Similar redn. of 3.6 .apprx.3.8:1 anti-syn-VIII and 1.3 .apprx.1.4:1 anti-syn-VIII gave 26.1, 23.3, 41.1, and 39.0, 15.0, 33.3% yields of IX, X, and XI, resp. Neither of the previously proposed mechanisms (CA 62: 16167e) based on the Neber and closely related rearrangement can reasonably explain the dependence of the products on the configurations of the oximes.
IT **16519-73-6P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 16519-73-6 CAPLUS
CN Aziridine, 2-methyl-3-(1-naphthyl)-, cis- (8CI) (CA INDEX NAME)

Relative stereochemistry.

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     FILE 'REGISTRY' ENTERED AT 12:01:12 ON 17 MAR 1999
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L1               STR
L2               STR
L3           271 SEA FILE=REGISTRY SSS FUL L1 NOT L2
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L4               STR L1
L5               STR L2
L6             0 S L4 NOT L5
L7           162 SEARCH L6  SUB=L3 FUL

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L10            5 FILE BIOSIS
L11            0 FILE EMBASE
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L13           38 DUP REM L12 (3 DUPLICATES REMOVED)

=> s l7 and (1967-1993)/py

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u
SEARCH ENDED BY USER

=> s l7 and (1967 or 1968 or 1969 or 1970 or 1971 or 1972 or 1973 or 1974 or
1975 or 1976 or 1977 or 1978 or 1980 or 1981 or 1982 or 1983 or 1983 or 1984
or 1985 or 1986)1993)/py

MISSING OPERATOR 1986)1993
The search profile that was entered contains terms or
nested terms that are not separated by a logical operator.

=> s l7 and (1967 or 1968 or 1969 or 1970 or 1971 or 1972 or 1973 or 1974 or
1975 or 1976 or 1977 or 1978 or 1980 or 1981 or 1982 or 1983 or 1983 or 1984
or 1985 or 1986)/py

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L16            5 FILE BIOSIS
L17            0 FILE EMBASE
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OR
                1974 OR 1975 OR 1976 OR 1977 OR 1978 OR 1980 OR 1981 OR 1982
OR
                1983 OR 1983 OR 1984 OR 1985 OR 1986)/PY

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MISSING OPERATOR 1993)PY
The search profile that was entered contains terms or
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=> s l7 and (1987 or 1988 or 1989 or 1990 or 1991 or 1992 or 1993)py

MISSING OPERATOR 1993)PY
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nested terms that are not separated by a logical operator.

=> s l7 and (1987 or 1988 or 1989 or 1990 or 1991 or 1992 or 1993)/py

L19           1 FILE MEDLINE
L20          16 FILE CAPLUS
L21           0 FILE BIOSIS
L22           0 FILE EMBASE

TOTAL FOR ALL FILES
L23          17 L7 AND (1987 OR 1988 OR 1989 OR 1990 OR 1991 OR 1992 OR
1993)/PY

=> s l18 or l23

L24           1 FILE MEDLINE
L25          38 FILE CAPLUS
L26           5 FILE BIOSIS
L27           0 FILE EMBASE

TOTAL FOR ALL FILES
L28          44 L18 OR L23

=> s l28 not l12

L29           0 FILE MEDLINE
L30           5 FILE CAPLUS
L31           0 FILE BIOSIS
L32           0 FILE EMBASE

TOTAL FOR ALL FILES
L33           5 L28 NOT L12

=> d 1-5 cbib abs hitstr


L33  ANSWER 1 OF 5  CAPLUS  COPYRIGHT 1999 ACS
1998:392147   Document No. 129:36463  Biologically active tropane derivatives.
     Davies, Huw M. L. (Wake Forest University, USA).  U.S. US 5760055 A
     19980602, 10 pp. Cont.-in-part of U. S. 63,431.  (English).  CODEN:
     USXXAM.  APPLICATION: US 96-589820 19960122.  PRIORITY: US 92-851090
     19920313; US 93-63431 19930518.
GI
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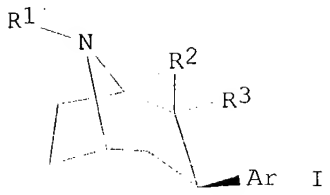


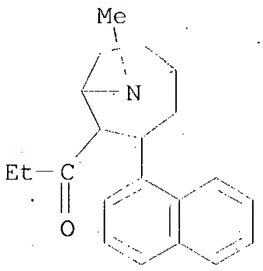
I

AB 3-Aryltropane derivs. I (Ar = (un)substituted naphthyl or phenyl; R1 = H, Me; R2, R3 = H, C1-8 ketone with only one of R1 and R2 being H at any one time) were prepd. from vinyldiazomethanes and pyrroles followed by reaction with a Grignard reagent. for selective blockade of DA and 5-HT uptake sites. Thus, 2-propanoyl-8-azabicyclo[3.2.1]oct-2-ene was treated with 2-naphthylmagnesium bromide to give 2.beta.-propanoyl-3.beta.-(2-naphthyl)-8-azabicyclo[3.2.1.]octane. 3.beta.-[4-(1-Methylethenyl)phenyl]-2.beta.-propanoyl-8-azabicyclo[3.2.1.]octane had a 5-HT binding affinity of 0.01 nM with a 5-HT/DA potency ratio of 160 and a 5-HT/NE ratio of 940.

IT **160324-21-0P**, WF 30
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(WF 30; prepn. of biol. active tropane derivs.)

RN 160324-21-0 CAPLUS

CN 1-Propanone, 1-[(1R,2S,3S,5S)-8-methyl-3-(1-naphthalenyl)-8-azabicyclo[3.2.1]oct-2-yl]-, rel- (9CI) (CA INDEX NAME)

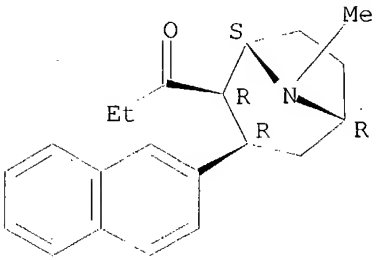


IT **146877-60-3P**, WF 23 **160324-19-6P**, WF 27
160324-23-2P, WF 33 **208449-30-3P**, WF 42
208449-31-4P, WF 38 **208449-32-5P**, WF 40
208449-33-6P, WF 41 **208449-34-7P**, WF 44
208449-35-8P, WF 48 **208449-36-9P**, WF 65
208449-37-0P, WF 52 **208449-38-1P**, WF 53
208449-40-5P, WF 51
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of biol. active tropane derivs.)

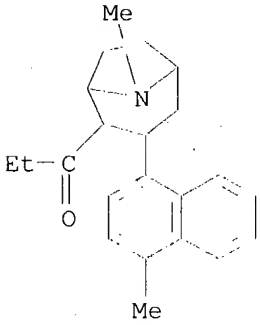
RN 146877-60-3 CAPLUS

CN 1-Propanone, 1-[(1R,2S,3S,5S)-8-methyl-3-(2-naphthalenyl)-8-azabicyclo[3.2.1]oct-2-yl]-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

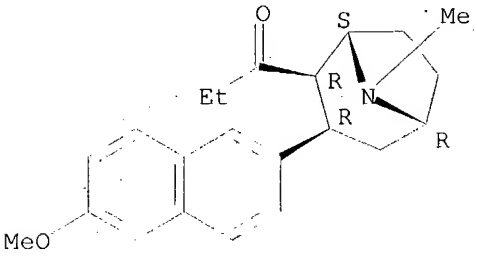


RN 160324-19-6 CAPLUS
CN 1-Propanone, 1-[(1R,2S,3S,5S)-8-methyl-3-(4-methyl-1-naphthalenyl)-8-azabicyclo[3.2.1]oct-2-yl]-, rel- (9CI) (CA INDEX NAME)

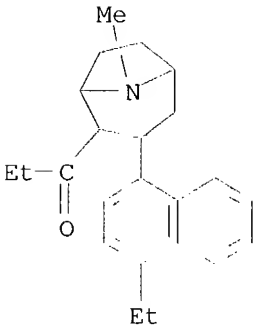


RN 160324-23-2 CAPLUS
CN 1-Propanone, 1-[(1R,2S,3S,5S)-3-(6-methoxy-2-naphthalenyl)-8-methyl-8-azabicyclo[3.2.1]oct-2-yl]-, rel- (9CI) (CA INDEX NAME)

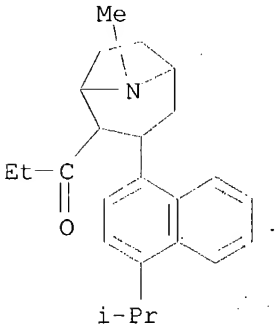
Relative stereochemistry.



RN 208449-30-3 CAPLUS
CN 1-Propanone, 1-[(1R,2S,3S,5S)-3-(4-ethyl-1-naphthalenyl)-8-methyl-8-azabicyclo[3.2.1]oct-2-yl]-, rel- (9CI) (CA INDEX NAME)

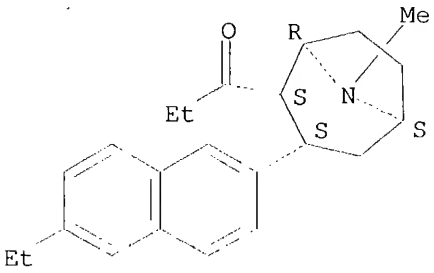


RN 208449-31-4 CAPLUS
CN 1-Propanone,
1-[(1R,2S,5S)-8-methyl-3-[4-(1-methylethyl)-1-naphthalenyl]-8-azabicyclo[3.2.1]oct-2-yl]-, rel- (9CI) (CA INDEX NAME)



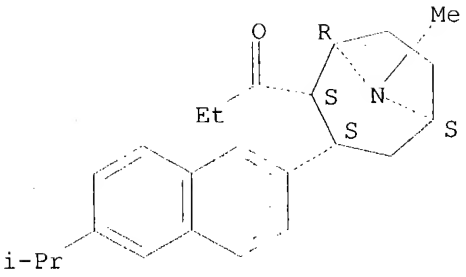
RN 208449-32-5 CAPLUS
CN 1-Propanone, 1-[(1R,2S,3S,5S)-3-(6-ethyl-2-naphthalenyl)-8-methyl-8-azabicyclo[3.2.1]oct-2-yl]-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



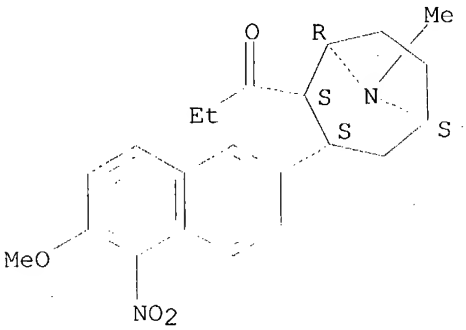
RN 208449-33-6 CAPLUS
CN 1-Propanone, 1-[(1R,2S,3S,5S)-8-methyl-3-[6-(1-methylethyl)-2-naphthalenyl]-8-azabicyclo[3.2.1]oct-2-yl]-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



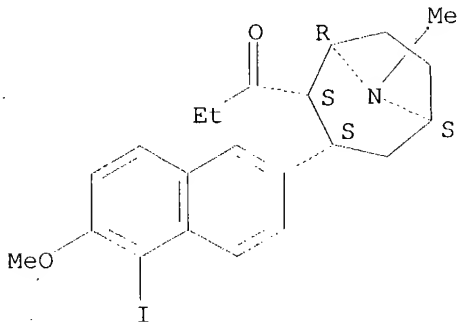
RN 208449-34-7 CAPLUS
CN 1-Propanone, 1-[(1R,2S,3S,5S)-3-(6-methoxy-5-nitro-2-naphthalenyl)-8-methyl-8-azabicyclo[3.2.1]oct-2-yl]-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



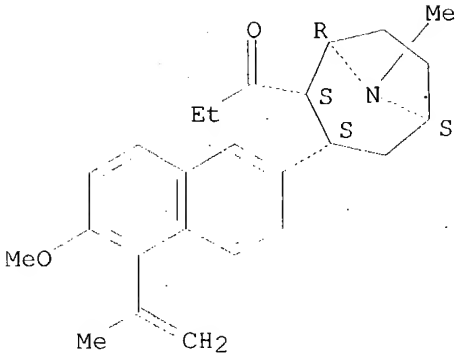
RN 208449-35-8 CAPLUS
CN 1-Propanone,
1-[(1R,2S,3S,5S)-3-(5-iodo-6-methoxy-2-naphthalenyl)-8-methyl-8-azabicyclo[3.2.1]oct-2-yl]-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



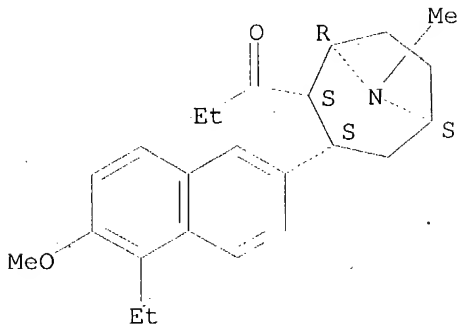
RN 208449-36-9 CAPLUS
CN 1-Propanone, 1-[(1R,2S,3S,5S)-3-[6-methoxy-5-(1-methylethenyl)-2-naphthalenyl]-8-methyl-8-azabicyclo[3.2.1]oct-2-yl]-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



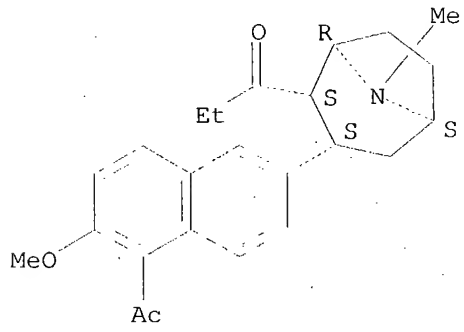
RN 208449-37-0 CAPLUS
CN 1-Propanone, 1-[(1R,2S,3S,5S)-3-(5-ethyl-6-methoxy-2-naphthalenyl)-8-methyl-8-azabicyclo[3.2.1]oct-2-yl]-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



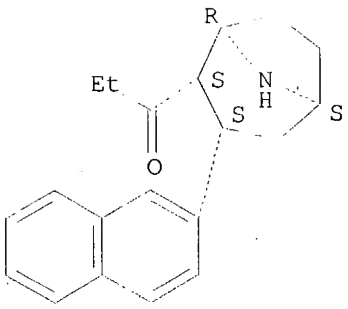
RN 208449-38-1 CAPLUS
CN 1-Propanone, 1-[(1R,2S,3S,5S)-3-(5-acetyl-6-methoxy-2-naphthalenyl)-8-methyl-8-azabicyclo[3.2.1]oct-2-yl]-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 208449-40-5 CAPLUS
CN 1-Propanone,
1-[(1R,2S,3S,5S)-3-(2-naphthalenyl)-8-azabicyclo[3.2.1]oct-2-yl]-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



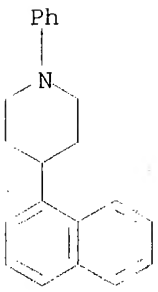
L33 ANSWER 2 OF 5 CAPLUS COPYRIGHT 1999 ACS
1994:323213 Document No. 120:323213 Synthesis and exploratory photophysical investigation of donor-bridge-acceptor systems derived from N-substituted 4-piperidones. Scherer, T.; Hielkema, W.; Krijnen, B.; Hermant, R. M.; Eijckelhoff, C.; Kerkhof, F.; Ng, A. K. F.; Verleg, R.; van der Tol. E. B.; et al. (Lab. Org. Chem., Univ. Amsterdam, Amsterdam, 1018 WS, Neth.). Recl. Trav. Chim. Pays-Bas, 112(10), 535-48 (English) **1993**. CODEN: RTCPA3. ISSN: 0165-0513. OTHER SOURCES: CASREACT 120:323213.

GI

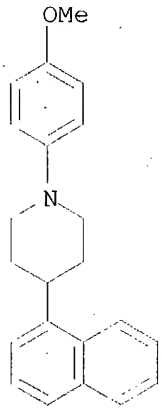
I

AB A two-step synthesis for N-aryl- and N-alkyl-substituted 4-piperidones I [R = Ph, 4-MeOC6H4, 4-MeC6H4, 3,5-Me2C6H3, 4-FC6H4, 4-PhC6H4, 2,4,6-Me3C6H2, 4-Me(CH2)5C6H4, 4-Me(CH2)13C6H4, cyclohexyl, 4-BrC6H4, 4-ClC6H4, 1-phenyl-4-piperidyl] is reported in which the N substituent can easily be varied. A no. of intramol. donor-acceptor systems was synthesized from these piperidones by conversion of the carbonyl functionality. The influence of the N-aryl donor on the electronic absorption and fluorescence spectra was investigated systematically. It was concluded that some systems can be used as efficient fluorescent probes with a high sensitivity for solvent polarity.

IT **134142-76-0P 153791-34-5P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 134142-76-0 CAPLUS
CN Piperidine, 4-(1-naphthalenyl)-1-phenyl- (9CI) (CA INDEX NAME)

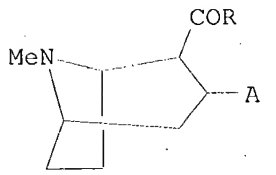


RN 153791-34-5 CAPLUS
CN Piperidine, 1-(4-methoxyphenyl)-4-(1-naphthalenyl)- (9CI) (CA INDEX NAME)



L33 ANSWER 3 OF 5 CAPLUS COPYRIGHT 1999 ACS
1994:134317 Document No. 120:134317 Biologically active tropane derivatives useful for treating cocaine addiction. Davies, Huw M. L.; Saikali, Elie; Childers, Steven R. (Wake Forest University, USA). PCT Int. Appl. WO 9318033 A1 **19930916**, 37 pp. DESIGNATED STATES: RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 93-US2741 19930310. PRIORITY: US 92-851090 19920313.

GI



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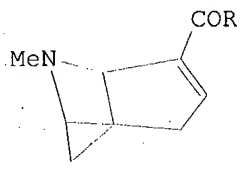
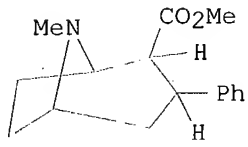


II



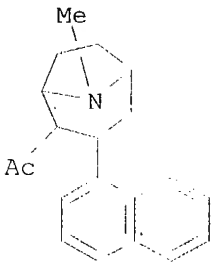
III

AB The title compds. I (A = aryl; R = C1-8 alkyl), which are potent cocaine antagonists, are prepd. by reacting an anhydroecgonine II with an aryl Grignard reagent in the presence of a catalytically effective amt. of a Cu (I or II) salt. Thus, 2.beta.-acetyl-8-methyl-3.beta.-phenyl-8-azabicyclo[3.2.1]octane and 2.alpha.-acetyl-8-methyl-3.beta.-phenyl-8-azabicyclo[3.2.1]octane were reacted with PhMgBr in the presence of CuBr-dimethylsulfide dimer, producing tropane III. III demonstrated a 50% inhibitory concn. in displacing [3H]CFT (Spealman et al., 1989) binding in rat striatal membranes of 200 nM, vs. -250 nM for cocaine.

IT **152783-27-2P 152783-28-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and cocaine antagonist activity of)

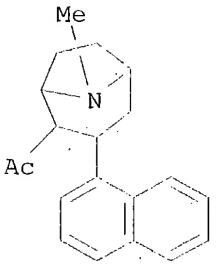
RN 152783-27-2 CAPLUS

CN Ethanone, 1-[8-methyl-3-(1-naphthalenyl)-8-azabicyclo[3.2.1]oct-2-yl]-, [1R-(exo,exo)]- (9CI) (CA INDEX NAME)



RN 152783-28-3 CAPLUS

CN Ethanone, 1-[8-methyl-3-(1-naphthalenyl)-8-azabicyclo[3.2.1]oct-2-yl]-, [1R-(2-endo,3-exo)]- (9CI) (CA INDEX NAME)



L33 ANSWER 4 OF 5 CAPLUS COPYRIGHT 1999 ACS

1994:8151 Document No. 120:8151 Exciplex formation in jet-cooled donor-bridge-acceptor compounds incorporating bridges with three degrees of flexibility. Wegewijs, B.; Scherer, T.; Rettschnick, R. P. H.; Verhoeven, J. W. (Laboratory of Organic Chemistry and Laboratory of Physical Chemistry, University of Amsterdam, Nieuwe Achtergracht 129 and 127, WS Amsterdam, 1018, Neth.). Chem. Phys., 176(2-3), 349-57 (English) **1993**. CODEN: CMPHC2. ISSN: 0301-0104.

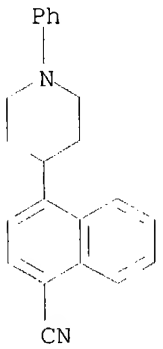
AB Intramol. exciplex formation was studied in three types of

donor-bridge-acceptor systems under jet-cooled conditions. While each of these contains the same aniline/cyanonaphthalene D/A pair the satd. hydrocarbon bridges differ in flexibility and length. With a flexible trimethylene bridge at least three conformers are present in the jet, which display different mechanisms of exciplex formation. The main conformer, probably fully extended, required an excess excitation energy .DELTA.E .gtoreq.1100 cm-1 for exciplex formation. This is thought to correspond with a mechanism in which IVR is the primary process bringing D and A in closer proximity. A broad long-wavelength excitation is furthermore assigned to the presence of a fully folded conformer undergoing direct excitation into the exciplex state. In addn. a partly folded conformer appears to be present from which exciplex formation can occur at negligible excess energy. It is argued that in this partly folded conformer D and A are within harpooning range even for .DELTA.E = 0, implying that after excitation at the spectral origin of the acceptor chromophore electron transfer can occur followed by electrostatically driven folding to form the emissive exciplex. With two more rigid types of bridges a harpooning mechanism is also involved in formation of the exciplex. With these bridges however, the ground-state donor-acceptor distance is much better defined and is furthermore too large to allow electron transfer at .DELTA.E = 0. As a result exciplex formation sets in only at excess energies sufficiently high to extend the harpooning range to or beyond the actual ground-state distance.

IT **149140-89-6**
RL: PRP (Properties)
(intramol. exciplex formation in, under jet-cooled conditions)

RN 149140-89-6 CAPLUS

CN 1-Naphthalenecarbonitrile, 4-(1-phenyl-4-piperidinyl)- (9CI) (CA INDEX NAME)



L33 ANSWER 5 OF 5 CAPLUS COPYRIGHT 1999 ACS

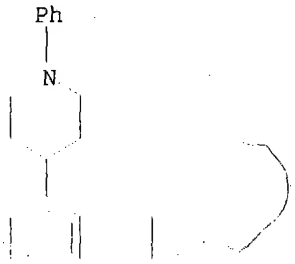
1994:8088 Document No. 120:8088 Formation of extended and folded charge separated states of donor-spacer-acceptor molecules with flexible and semirigid .sigma.-bond spacers. Schuddeboom, Wouter; Scherer, Taco; Warman, John M.; Verhoeven, Jan W. (IRI, Delft Univ. Technol., Delft, 2629 JB, Neth.). J. Phys. Chem., 97(50), 13092-8 (English) **1993**. CODEN: JPCHAX. ISSN: 0022-3654. OTHER SOURCES: CJACS.

AB Charge sepn. resulting from photoexcitation of donor-spacer-acceptor mols., D(S)A, with an anilino (An) donor, a naphthalene (N) or cyanonaphthalene (NCN) acceptor, and either flexible (trimethylene) or semirigid (piperidine) four .sigma.-bond spacers, has been investigated by

time resolved microwave cond. and fluorescence techniques. For the An/N pair in cyclohexane, close approach of the donor and acceptor moieties is necessary for charge sepn. For the larger driving force An/NCN couple, charge sepn. can occur in the fully extended configuration. In benzene, charge sepn. occurs in the extended configuration for both D/A pairs. For the trimethylene spacer mols., contact exciplexes are rapidly formed either by prior folding or by harpooning. For the semirigid spacer, electrostatically-driven folding, involving inversion of the piperidine ring, can occur subsequent to long-distance charge sepn. on a time scale of several nanoseconds.

IT **134142-76-0**
RL: PRP (Properties)
(photoexcitation of, charge sepn. in, conformation in relation to)

RN 134142-76-0 CAPLUS
CN Piperidine, 4-(1-naphthalenyl)-1-phenyl- (9CI) (CA INDEX NAME)



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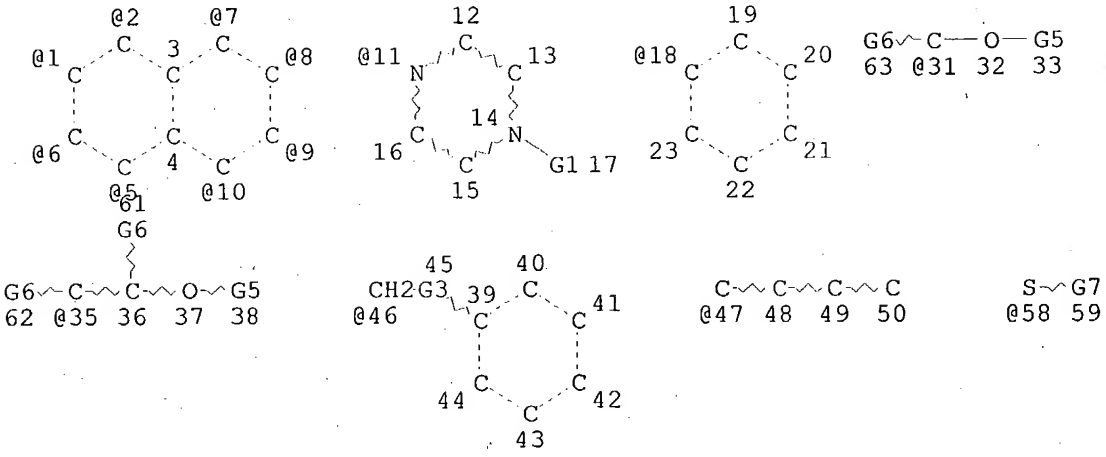

Page 1-A

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Page 2-A
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VAR G2=C/N
REP G3=(0-5) CH2
VAR G4=52/56/58/X
VAR G5=ME/ET/I-PR/N-PR/T-BU/S-BU/I-BU/N-BU
VAR G6=H/ME
VAR G7=C/H
VPA 11-7/8/9/10 U
VPA 60-2/1/6/5 U
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DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 55

STEREO ATTRIBUTES: NONE
L22 30 SEA FILE=REGISTRY SSS FUL L20

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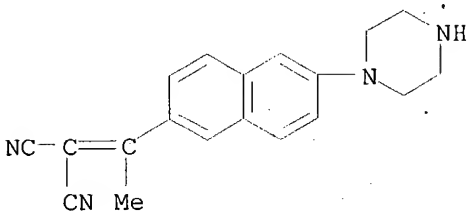
SEARCH TIME: 00.00.06

L22 ANSWER 1 OF 30 REGISTRY COPYRIGHT 1999 ACS
RN 211109-16-9 REGISTRY
CN Propanedinitrile, [1-[6-(1-piperazinyl)-2-naphthalenyl]ethylidene]- (9CI) (CA INDEX NAME)

FS 3D CONCORD
MF C19 H18 N4
SR CA
LC STN Files: CA, CAPLUS

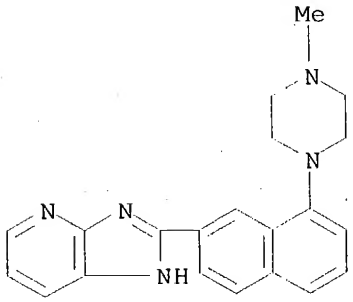


1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 129:161541 Functionalization of a viscosity-sensitive fluorophore for probing of biological systems. Petric, Andrej; Jacobson, Andrew F.; Barrio, Jorge R. (Faculty of Chemistry and Chemical Technology, University of Ljubljana, Ljubljana, 1000, Slovenia). Bioorg. Med. Chem. Lett., 8(12), 1455-1460 (English) 1998. CODEN: BMCLE8. ISSN: 0960-894X. Publisher: Elsevier Science Ltd..

AB Functionalization of a viscosity-sensitive visible wavelength fluorophore 2-(1,1-dicyanopropenyl-2)-6-dimethylaminonaphthalene (DDNP), with the intent to incorporate its favorable optical properties into a probe for structural and functional imaging by fluorescence microscopy, is described. Spiperone, a highly potent ligand for the dopamine D2 receptors, was conjugated via an ethylpiperazine moiety to the fluorophore giving fluorescent probes that can be excited in the UV and Vis range.

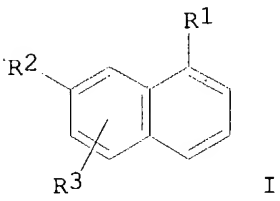
L22 ANSWER 2 OF 30 REGISTRY COPYRIGHT 1999 ACS
RN 197149-58-9 REGISTRY
CN 1H-Imidazo[4,5-b]pyridine, 2-[8-(4-methyl-1-piperazinyl)-2-naphthalenyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C21 H21 N5
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 129:302650 Preparation of N-naphthylpiperazines and analogs for
treatment of lung carcinoma. Howard, Harry R., Jr. (Pfizer Inc., USA). U.S. US 5821245 A 19981013, 21 pp. (English). CODEN: USXXAM. APPLICATION: US 97-815671 19970313.

GI



I

AB Title compds. [I; R1 = e.g., ZR11; R2 = R4, OR4, NR4R5, (CH2)cC(:X)NH(CH2)bR4, etc.; R3 = H, halo, alkyl, alkoxy, etc.; R4,R5 = Ph, heterocyclyl, heteroaryl, etc.; R11 = H, alkyl, aryl(alkyl), alkoxycarbonyl, etc.; X = O or S; z = piperazine-1,4-diyl; b,c = 0-6] were
prepd. as 5-HT1D receptor antagonists for treatment of small cell lung carcinoma (no data). Thus, 1-(4-methyl-1-piperazinyl)-7-hydroxynaphthalene was etherified by 5-chloromethyl-3-phenyl-1,2,4-oxadiazole (prepn. each given) to give I (R1 = 4-methyl-1-piperazinyl, R2 = 3-phenyl-1,2,4-oxadiazol-5-ylmethoxy, R3 = H).

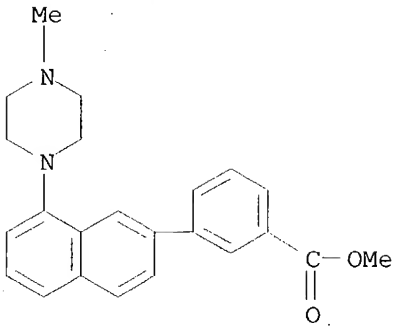
REFERENCE 2: 127:293252 Preparation of heterocyclyl-substituted naphthalene derivatives for treating lung carcinoma. Howard, Harry R., Jr. (Pfizer Inc., USA). Eur. Pat. Appl. EP 795328 A1 19970917, 39 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE. (English). CODEN: EPXXDW. APPLICATION: EP 97-301474 19970305. PRIORITY: US 96-13501 19960315.

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. [I; R1 = II-IV; R2 = C1-6 alkyl, CN, NO2, etc.; R3 = H, halo, CN, etc.; R10 = H, C1-6 alkyl, OH, etc.; R11 = H, C1-6 alkyl, aryl, etc.; a = 1-2] and their salts, useful for inhibiting cell growth in human
small cell lung carcinoma through inhibition of the 5-HT1D receptor, were prepd. Thus, treatment of 1-(7-hydroxynaphthyl)-4-methylpiperazine with NaH in DMF followed by addn. of 5-chloromethyl-3-phenyl-1,2,4-oxadiazole in DMF afforded 47% the title compd. V.2HCl. Compds. I are effective at 0.1-400 mg/unit which could be administered, e.g., 1-4 times/day.

L22 ANSWER 3 OF 30 REGISTRY COPYRIGHT 1999 ACS
RN 176700-56-4 REGISTRY
CN Benzoic acid, 3-[8-(4-methyl-1-piperazinyl)-2-naphthalenyl]-, methyl ester, monohydrochloride (9CI) (CA INDEX NAME)
MF C23 H24 N2 O2 . Cl H
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
CRN (163465-37-0)



● HCl

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 124:343334 Novel compositions containing sertraline and a 5-HT1D receptor agonist or antagonist. Chenard, Bertrand L.; Howard, Harry R.; Macor, John E.; Schulz, David W.; Sprouse, Jeffrey S. (Pfizer Inc., USA). Eur. Pat. Appl. EP 701819 A2 19960320, 51 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR; IE, IT, LI, LU, NL, PT, SE. (English). CODEN: EPXXDW. APPLICATION: EP 95-306249 19950907. PRIORITY: US 94-306230 19940914.

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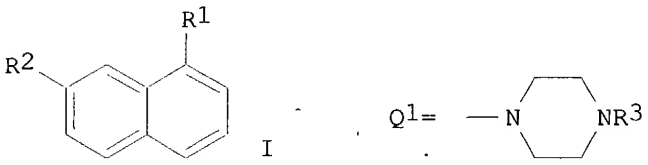
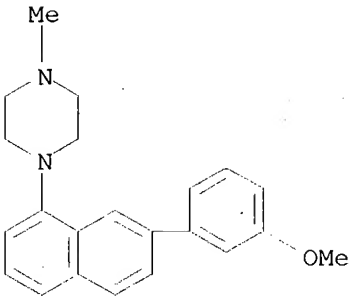


AB Claimed is a pharmaceutical compn. contg. a 5-HT re-uptake inhibitor, a pharmaceutically acceptable carrier, and a compd. I [R1 = Q1, etc.; R2 = R4, etc.; R4 = H, CF3, alkyl, alkylaryl, etc.; a proviso is given; R3 = H, alkyl, aryl, etc.]. Compds. I were assayed for 5-HT1A and 5-HT1D affinity and showed IC50 values of less than 0.6 .mu.M for at least one of said affinities. 7-Benzamido-1-(4-methyl-1-piperazinyl)naphthalene was prepd. in several steps from 7-amino-.alpha.-tetralone.

L22 ANSWER 4 OF 30 REGISTRY COPYRIGHT 1999 ACS
RN 163498-90-6 REGISTRY
CN Piperazine, 1-[7-(3-methoxyphenyl)-1-naphthalenyl]-4-methyl-, monohydrochloride (9CI) (CA INDEX NAME)
MF C22 H24 N2 O . Cl H
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
CRN (163465-70-1)



● HCl

2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 124:343334 Novel compositions containing sertraline and a 5-HT1D receptor agonist or antagonist. Chenard, Bertrand L.; Howard, Harry R.; Macor, John E.; Schulz, David W.; Sprouse, Jeffrey S. (Pfizer Inc., USA). Eur. Pat. Appl. EP 701819 A2 19960320, 51 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE. (English). CODEN: EPXXDW. APPLICATION: EP 95-306249 19950907. PRIORITY: US 94-306230 19940914.

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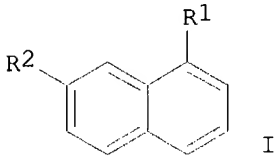

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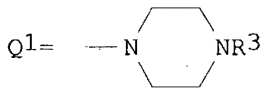

AB Claimed is a pharmaceutical compn. contg. a 5-HT re-uptake inhibitor, a pharmaceutically acceptable carrier, and a compd. I [R1 = Q1, etc.; R2 = R4, etc.; R4 = H, CF3, alkyl, alkylaryl, etc.; a proviso is given; R3 = H, alkyl, aryl, etc.]. Compds. I were assayed for 5-HT1A and 5-HT1D affinity and showed IC50 values of less than 0.6 .mu.M for at least one of said affinities. 7-Benzamido-1-(4-methyl-1-piperazinyl)naphthalene was prepd. in several steps from 7-amino-.alpha.-tetralone.

REFERENCE 2: 122:314570 Preparation of heterocyclylnaphthalene derivatives as serotonin 5-HT1 agonists and antagonists.. Chenard, Bertrand L.; Macor, John E.; Segelstein, Barbara E. (Pfizer Inc., USA). PCT Int. Appl. WO 9421619 A1 19940929, 85 pp. DESIGNATED STATES: W: AU, BR, CA, CN, CZ, JP, KR, NO, NZ, PL, RU, US; RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE. (English). CODEN: PIXXD2. APPLICATION: WO 94-US1206 19940215. PRIORITY: US 93-32042 19930316.

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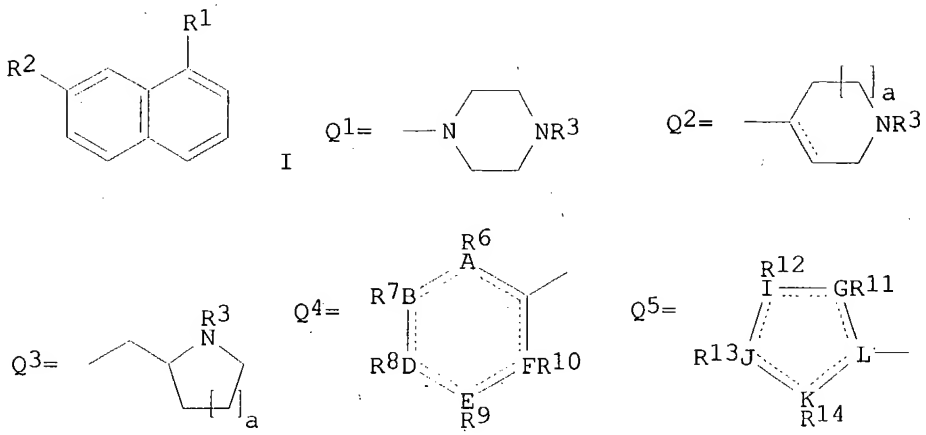

AB Title compds. [I; R1 = Q1-Q3, etc.; R2 = R4, OR4, OS(O)2R4, NR4R5, R4(CH2)bNH(C:X)(CH2)c, R4(CH2)bO(C:O)NH(CH2)c(C:O)NH, R4(C:O)NH(C:O)NH, (CH2)bNH(C:X)(CH2)bO(C:O)(CH2)cR4, NH(C:X)NHR4, R4O(C:O)O, O(C:O)NHR4, R4O(C:O)NH, (CH2)b(C:O)(CH2)cR4, NHS(O)2R4, C(OH)R4R5, CH(OH)R4, (C:O)NR4R5, CN, NO2, substituted alkyl, (substituted) alkenyl, alkynyl; R3 = H, alkyl, alkylaryl, aryl; R4, R5 = Q4, Q5, H, CF3, alkyl, alkylaryl, etc.; R6-R14 = H, halo, CF3, CN, NO2, aryl, alkylaryl, alkyl, alkenyl, alkynyl, OR20, COR20, NR20R21, etc.; adjacent pairs of R6-R14 = atoms to form 5-7 membered rings; R20, R21 = H, alkyl, aryl, alkylaryl; R20R21 = atoms to form 4-7 membered rings; A, B, D, E, F, L = C, N; G, I, J, K = C, N, O, S, C:O; X = O, S; a = 0-2; b, c = 0-6; dotted line = optional double bond; with provisos], were prepd. These compds. are useful psychotherapeutics and are potent serotonin (5-HT1) agonists and antagonists and may be used in the treatment of depression, anxiety, eating disorders, obesity, drug abuse, cluster headache, migraine, pain and chronic paroxysmal hemicrania and headache assocd. with vascular disorders, and other disorders arising from deficient serotonergic neurotransmission. The compds. can also be used as centrally acting antihypertensives and vasodilators. Thus, 7-amino-.alpha.-tetralone was stirred with PhCOCl/Et3N in THF to give 85% 7-benzamido-.alpha.-tetralone. This in THF at -78.degree. was treated with N-methylpiperazine and TiCl4 to give 83% 7-benzamido-1-(4-methyl-1-piperazinyl)-3,4-dihydronaphthalene. The latter was refluxed with Pd/C in xylene to give title compd. 7-benzamido-1-(4-methyl-1-piperazinyl)naphthalene and 7-benzamido-1-(4-methyl-1-piperazinyl)-1,2,3,4-tetrahydronaphthalene. I showed IC50 <0.60 nM for 5-HT1A and/or 5-HT1D affinity.

L22 ANSWER 5 OF 30 REGISTRY COPYRIGHT 1999 ACS
RN 163498-87-1 REGISTRY
CN 3H-Imidazo[4,5-b]pyridine, 3-[8-(1-piperazinyl)-2-naphthalenyl]-, dihydrochloride (9CI) (CA INDEX NAME)
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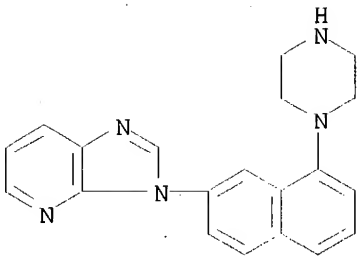
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
CRN (163465-63-2)

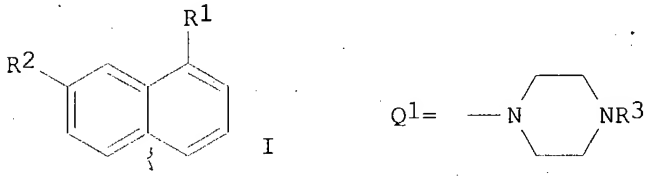


● 2 HCl

2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 124:343334 Novel compositions containing sertraline and a 5-HT1D receptor agonist or antagonist. Chenard, Bertrand L.; Howard, Harry R.; Macor, John E.; Schulz, David W.; Sprouse, Jeffrey S. (Pfizer Inc., USA). Eur. Pat. Appl. EP 701819 A2 19960320, 51 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE. (English). CODEN: EPXXDW. APPLICATION: EP 95-306249 19950907. PRIORITY: US 94-306230 19940914.

GI



AB Claimed is a pharmaceutical compn. contg. a 5-HT re-uptake inhibitor, a pharmaceutically acceptable carrier, and a compd. I [R1 = Q1, etc.; R2 = R4, etc.; R4 = H, CF3, alkyl, alkylaryl, etc.; a proviso is given; R3 = H, alkyl, aryl, etc.]. Compds. I were assayed for 5-HT1A and 5-HT1D affinity and showed IC50 values of less than 0.6 .mu.M for at least one of said affinities. 7-Benzamido-1-(4-methyl-1-piperazinyl)naphthalene was prepd. in several steps from 7-amino-.alpha.-tetralone.

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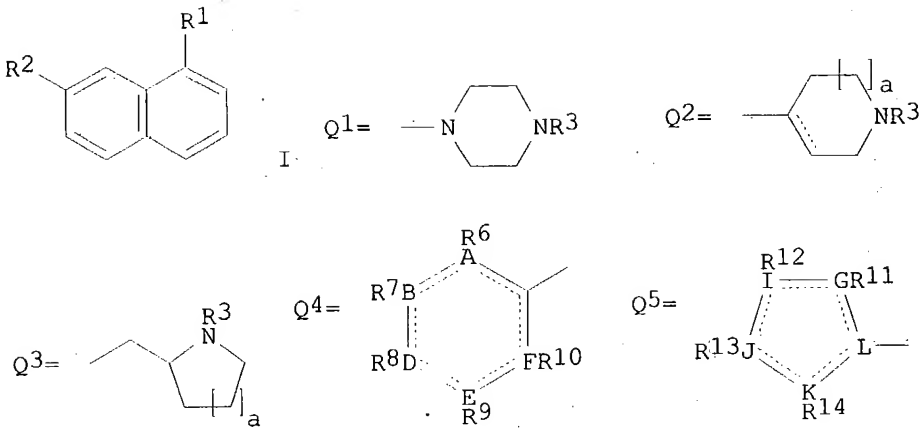
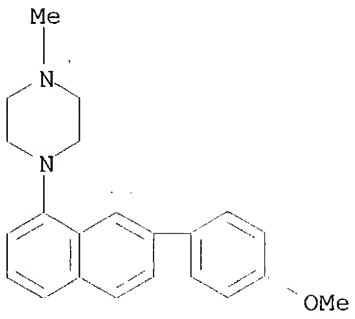


AB Title compds. [I; R1 = Q1-Q3, etc.; R2 = R4, OR4, OS(O)2R4, NR4R5, R4(CH2)bNH(C:X)(CH2)c, R4(CH2)bO(C:O)NH(CH2)c(C:O)NH, R4(C:O)NH(C:O)NH, (CH2)bNH(C:X)(CH2)bO(C:O)(CH2)cR4, NH(C:X)NHR4, R4O(C:O)O, O(C:O)NHR4, R4O(C:O)NH, (CH2)b(C:O)(CH2)cR4, NHS(O)2R4, C(OH)R4R5, CH(OH)R4, (C:O)NR4R5, CN, NO2, substituted alkyl, (substituted) alkenyl, alkynyl; R3 = H, alkyl, alkylaryl, aryl; R4, R5 = Q4, Q5, H, CF3, alkyl, alkylaryl, etc.; R6-R14 = H, halo, CF3, CN, NO2, aryl, alkylaryl, alkyl, alkenyl, alkynyl, OR20, COR20, NR20R21, etc.; adjacent pairs of R6-R14 = atoms to form 5-7 membered rings; R20, R21 = H, alkyl, aryl, alkylaryl; R20R21 = atoms to form 4-7 membered rings; A, B, D, E, F, L = C, N; G, I, J, K = C, N, O, S, C:O; X = O, S; a = 0-2; b, c = 0-6; dotted line = optional double bond; with provisos], were prepd. These compds. are useful psychotherapeutics and are potent serotonin (5-HT1) agonists and antagonists and may be used in the treatment of depression, anxiety, eating disorders, obesity, drug abuse, cluster headache, migraine, pain and chronic paroxysmal hemicrania and headache assocd. with vascular disorders, and other disorders arising from deficient serotonergic neurotransmission. The compds. can also be used as centrally acting antihypertensives and vasodilators. Thus, 7-amino-.alpha.-tetralone was stirred with PhCOCl/Et3N in THF to give 85% 7-benzamido-.alpha.-tetralone. This in THF at -78.degree. was treated with N-methylpiperazine and TiCl4 to give 83% 7-benzamido-1-(4-methyl-1-piperazinyl)-3,4-dihydronaphthalene. The latter was refluxed with Pd/C in xylene to give title compd. 7-benzamido-1-(4-methyl-1-piperazinyl)naphthalene and 7-benzamido-1-(4-methyl-1-piperazinyl)-1,2,3,4-tetrahydronaphthalene. I showed IC50 <0.60 nM for 5-HT1A and/or 5-HT1D affinity.

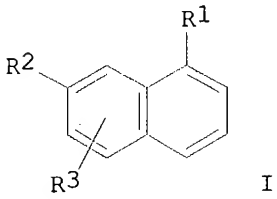
L22 ANSWER 6 OF 30 REGISTRY COPYRIGHT 1999 ACS
RN 163465-74-5 REGISTRY
CN Piperazine, 1-[7-(4-methoxyphenyl)-1-naphthalenyl]-4-methyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C22 H24 N2 O
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



3 REFERENCES IN FILE CA (1967 TO DATE)
3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 129:302650 Preparation of N-naphthylpiperazines and analogs for
treatment of lung carcinoma. Howard, Harry R., Jr. (Pfizer Inc., USA). U.S. US 5821245 A 19981013, 21 pp. (English). CODEN: USXXAM. APPLICATION: US 97-815671 19970313.

GI



I

AB Title compds. [I; R1 = e.g., ZR11; R2 = R4, OR4, NR4R5, (CH2)cC(:X)NH(CH2)bR4, etc.; R3 = H, halo, alkyl, alkoxy, etc.; R4,R5 = Ph, heterocyclyl, heteroaryl, etc.; R11 = H, alkyl, aryl(alkyl), alkoxycarbonyl, etc.; X = O or S; z = piperazine-1,4-diyl; b,c = 0-6] were
prepd. as 5-HT1D receptor antagonists for treatment of small cell lung carcinoma (no data). Thus, 1-(4-methyl-1-piperazinyl)-7-hydroxynaphthalene was etherified by 5-chloromethyl-3-phenyl-1,2,4-oxadiazole (prepn. each given) to give I (R1 = 4-methyl-1-piperazinyl, R2 = 3-phenyl-1,2,4-oxadiazol-5-ylmethoxy, R3 = H).

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GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. [I; R1 = II-IV; R2 = C1-6 alkyl, CN, NO2, etc.; R3 = H, halo, CN, etc.; R10 = H, C1-6 alkyl, OH, etc.; R11 = H, C1-6 alkyl, aryl,

etc.; a = 1-2] and their salts, useful for inhibiting cell growth in human small cell lung carcinoma through inhibition of the 5-HT1D receptor, were prepd. Thus, treatment of 1-(7-hydroxynaphthyl)-4-methylpiperazine with NaH in DMF followed by addn. of 5-chloromethyl-3-phenyl-1,2,4-oxadiazole in DMF afforded 47% the title compd. V.2HCl. Compds. I are effective at 0.1-400 mg/unit which could be administered, e.g., 1-4 times/day.

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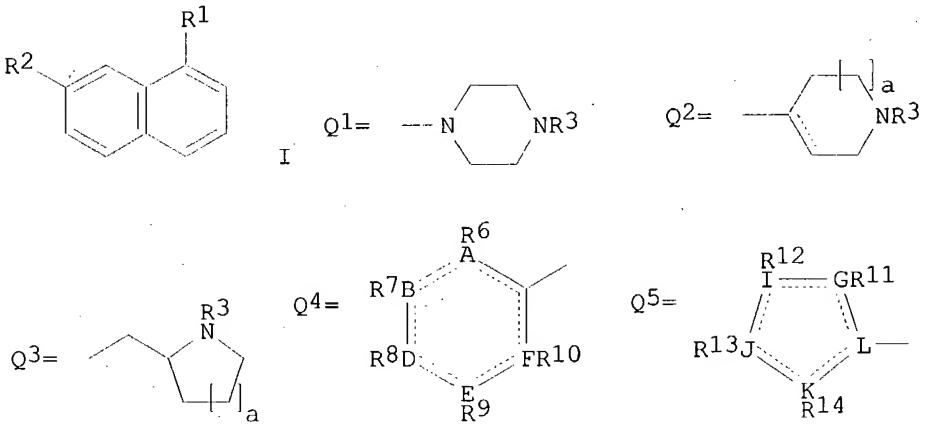

AB Title compds. [I; R1 = Q1-Q3, etc.; R2 = R4, OR4, OS(O)2R4, NR4R5, R4(CH2)bNH(C:X)(CH2)c, R4(CH2)bO(C:O)NH(CH2)c(C:O)NH, R4(C:O)NH(C:O)NH, (CH2)bNH(C:X)(CH2)bO(C:O)(CH2)cR4, NH(C:X)NHR4, R4O(C:O)O, O(C:O)NHR4, R4O(C:O)NH, (CH2)b(C:O)(CH2)cR4, NHS(O)2R4, C(OH)R4R5, CH(OH)R4, (C:O)NR4R5, CN, NO2, substituted alkyl, (substituted) alkenyl, alkynyl; R3 = H, alkyl, alkylaryl, aryl; R4, R5 = Q4, Q5, H, CF3, alkyl, alkylaryl, etc.; R6-R14 = H, halo, CF3, CN, NO2, aryl, alkylaryl, alkyl, alkenyl, alkynyl, OR20, COR20, NR20R21, etc.; adjacent pairs of R6-R14 = atoms to form 5-7 membered rings; R20, R21 = H, alkyl, aryl, alkylaryl; R20R21 = atoms to form 4-7 membered rings; A, B, D, E, F, L = C, N; G, I, J, K = C, N, O, S, C:O; X = O, S; a = 0-2; b, c = 0-6; dotted line = optional double bond; with provisos], were prepd. These compds. are useful psychotherapeutics and are potent serotonin (5-HT1) agonists and antagonists and may be used in the treatment of depression, anxiety, eating disorders, obesity, drug abuse, cluster headache, migraine, pain and chronic paroxysmal hemicrania and headache assocd. with vascular disorders, and other disorders arising from deficient serotonergic

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L22 ANSWER 7 OF 30 REGISTRY COPYRIGHT 1999 ACS
RN 163465-73-4 REGISTRY
CN Pyrimidine, 5-[8-(1-piperazinyl)-2-naphthalenyl]- (9CI) (CA INDEX NAME)
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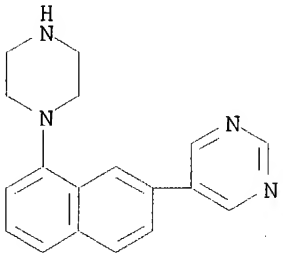
MF C18 H18 N4
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



3 REFERENCES IN FILE CA (1967 TO DATE)
3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

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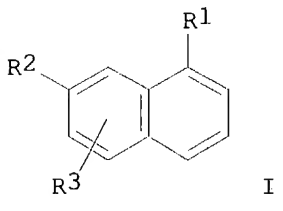
GI



I

AB Title compds. [I; R1 = e.g., ZR11; R2 = R4, OR4, NR4R5, (CH2)cC(:X)NH(CH2)bR4, etc.; R3 = H, halo, alkyl, alkoxy, etc.; R4,R5 = Ph, heterocyclyl, heteroaryl, etc.; R11 = H, alkyl, aryl(alkyl), alkoxycarbonyl, etc.; X = O or S; z = piperazine-1,4-diyl; b,c = 0-6] were prepd. as 5-HT1D receptor antagonists for treatment of small cell lung

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GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

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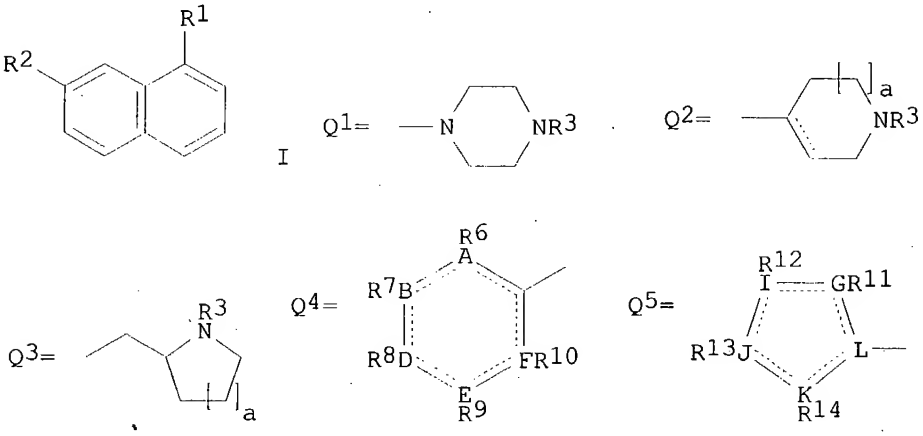

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L22 ANSWER 8 OF 30 REGISTRY COPYRIGHT 1999 ACS
RN 163465-70-1 REGISTRY
CN Piperazine, 1-[7-(3-methoxyphenyl)-1-naphthalenyl]-4-methyl- (9CI) (CA INDEX NAME)
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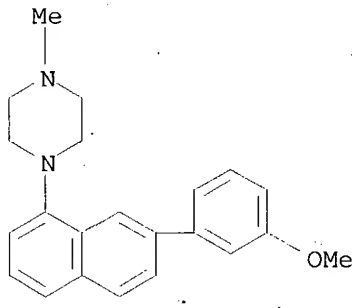
MF C22 H24 N2 O
CI COM
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



4 REFERENCES IN FILE CA (1967 TO DATE)
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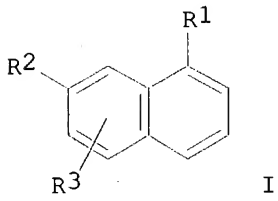

I

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GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. [I; R1 = II-IV; R2 = C1-6 alkyl, CN, NO2, etc.; R3 = H, halo, CN, etc.; R10 = H, C1-6 alkyl, OH, etc.; R11 = H, C1-6 alkyl, aryl, etc.; a = 1-2] and their salts, useful for inhibiting cell growth in human small cell lung carcinoma through inhibition of the 5-HT1D receptor, were prepd. Thus, treatment of 1-(7-hydroxynaphthyl)-4-methylpiperazine with NaH in DMF followed by addn. of 5-chloromethyl-3-phenyl-1,2,4-oxadiazole in DMF afforded 47% the title compd. V.2HCl. Compds. I are effective at 0.1-400 mg/unit which could be administered, e.g., 1-4 times/day.

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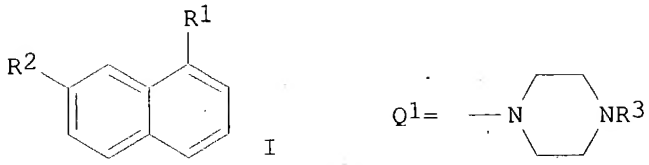

AB Claimed is a pharmaceutical compn. contg. a 5-HT re-uptake inhibitor, a pharmaceutically acceptable carrier, and a compd. I [R1 = Q1, etc.; R2 = R4, etc.; R4 = H, CF3, alkyl, alkylaryl, etc.; a proviso is given; R3 = H, alkyl, aryl, etc.]. Compds. I were assayed for 5-HT1A and 5-HT1D affinity and showed IC50 values of less than 0.6 .mu.M for at least one of said affinities. 7-Benzamido-1-(4-methyl-1-piperazinyl)naphthalene was prepd. in several steps from 7-amino-.alpha.-tetralone.

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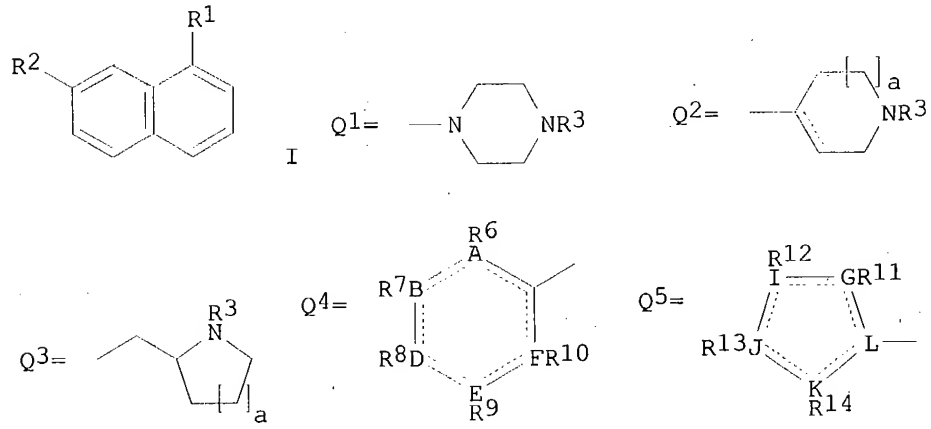

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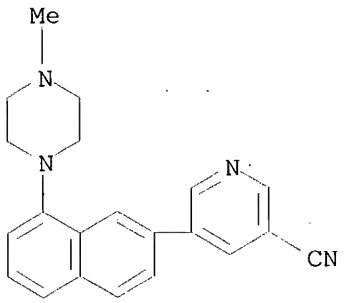
alkynyl, OR20, COR20, NR20R21, etc.; adjacent pairs of R6-R14 = atoms to form 5-7 membered rings; R20, R21 = H, alkyl, aryl, alkylaryl; R20R21 = atoms to form 4-7 membered rings; A, B, D, E, F, L = C, N; G, I, J, K = C, N, O, S, C:O; X = O, S; a = 0-2; b, c = 0-6; dotted line = optional double bond; with provisos], were prepd. These compds. are useful psychotherapeutics and are potent serotonin (5-HT1) agonists and antagonists and may be used in the treatment of depression, anxiety, eating disorders, obesity, drug abuse, cluster headache, migraine, pain and chronic paroxysmal hemicrania and headache assocd. with vascular disorders, and other disorders arising from deficient serotonergic neurotransmission. The compds. can also be used as centrally acting antihypertensives and vasodilators. Thus, 7-amino-.alpha.-tetralone was stirred with PhCOCl/Et3N in THF to give 85% 7-benzamido-.alpha.-tetralone. This in THF at -78.degree. was treated with N-methylpiperazine and TiCl4 to give 83% 7-benzamido-1-(4-methyl-1-piperazinyl)-3,4-dihydronaphthalene. The latter was refluxed with Pd/C in xylene to give title compd. 7-benzamido-1-(4-methyl-1-piperazinyl)naphthalene and 7-benzamido-1-(4-methyl-1-piperazinyl)-1,2,3,4-tetrahydronaphthalene. I showed IC50 <0.60 nM for 5-HT1A and/or 5-HT1D affinity.

L22 ANSWER 9 OF 30 REGISTRY COPYRIGHT 1999 ACS
RN 163465-66-5 REGISTRY
CN 3-Pyridinecarbonitrile, 5-[8-(4-methyl-1-piperazinyl)-2-naphthalenyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C21 H20 N4
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



4 REFERENCES IN FILE CA (1967 TO DATE)
4 REFERENCES IN FILE CAPLUS (1967 TO DATE)

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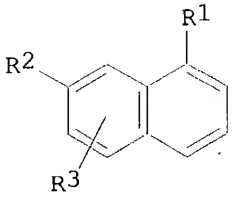

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AB Title compds. [I; R1 = e.g., ZR11; R2 = R4, OR4, NR4R5, (CH2)cC(:X)NH(CH2)bR4, etc.; R3 = H, halo, alkyl, alkoxy, etc.; R4,R5 = Ph, heterocyclyl, heteroaryl, etc.; R11 = H, alkyl, aryl(alkyl), alkoxycarbonyl, etc.; X = O or S; z = piperazine-1,4-diyl; b,c = 0-6] were prepd. as 5-HT1D receptor antagonists for treatment of small cell lung carcinoma (no data). Thus, 1-(4-methyl-1-piperazinyl)-7-hydroxynaphthalene was etherified by 5-chloromethyl-3-phenyl-1,2,4-oxadiazole (prepn. each given) to give I (R1 = 4-methyl-1-piperazinyl, R2 = 3-phenyl-1,2,4-oxadiazol-5-ylmethoxy, R3 = H).

REFERENCE 2: 127:293252 Preparation of heterocyclyl-substituted naphthalene derivatives for treating lung carcinoma. Howard, Harry R., Jr. (Pfizer Inc., USA). Eur. Pat. Appl. EP 795328 A1 19970917, 39 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE. (English). CODEN: EPXXDW. APPLICATION: EP 97-301474 19970305. PRIORITY: US 96-13501 19960315.

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. [I; R1 = II-IV; R2 = C1-6 alkyl, CN, NO2, etc.; R3 = H, halo, CN, etc.; R10 = H, C1-6 alkyl, OH, etc.; R11 = H, C1-6 alkyl, aryl, etc.; a = 1-2] and their salts, useful for inhibiting cell growth in human small cell lung carcinoma through inhibition of the 5-HT1D receptor, were prepd. Thus, treatment of 1-(7-hydroxynaphthyl)-4-methylpiperazine with NaH in DMF followed by addn. of 5-chloromethyl-3-phenyl-1,2,4-oxadiazole in DMF afforded 47% the title compd. V.2HCl. Compds. I are effective at 0.1-400 mg/unit which could be administered, e.g., 1-4 times/day.

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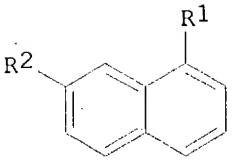

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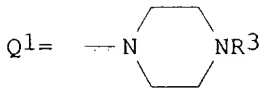

AB Claimed is a pharmaceutical compn. contg. a 5-HT re-uptake inhibitor, a pharmaceutically acceptable carrier, and a compd. I [R1 = Q1, etc.; R2 = R4, etc.; R4 = H, CF3, alkyl, alkylaryl, etc.; a proviso is given; R3 = H, alkyl, aryl, etc.]. Compds. I were assayed for 5-HT1A and 5-HT1D affinity and showed IC50 values of less than 0.6 .mu.M for at least one of said affinities. 7-Benzamido-1-(4-methyl-1-piperazinyl)naphthalene was prepd. in several steps from 7-amino-.alpha.-tetralone.

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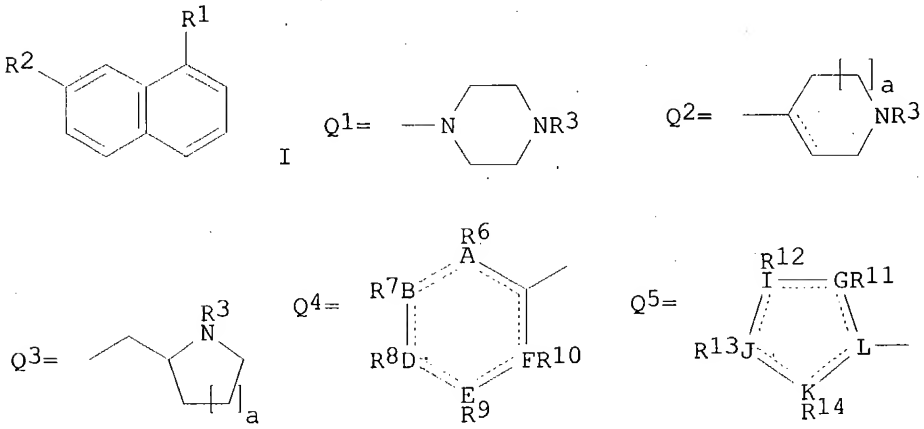

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L22 ANSWER 10 OF 30 REGISTRY COPYRIGHT 1999 ACS
RN 163465-65-4 REGISTRY
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MF C19 H20 N4
SR CA
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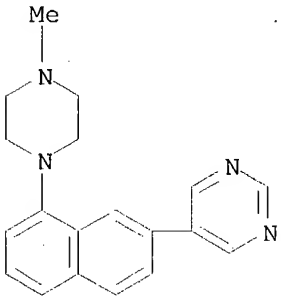

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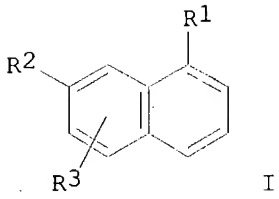

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GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

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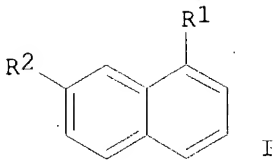

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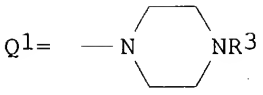

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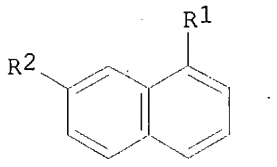

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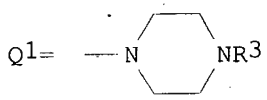

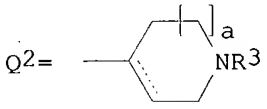

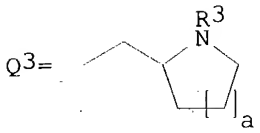

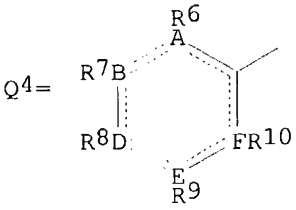

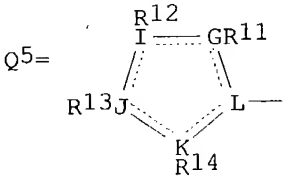

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L22 ANSWER 11 OF 30 REGISTRY COPYRIGHT 1999 ACS
RN 163465-63-2 REGISTRY
CN 3H-Imidazo[4,5-b]pyridine, 3-[8-(1-piperazinyl)-2-naphthalenyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
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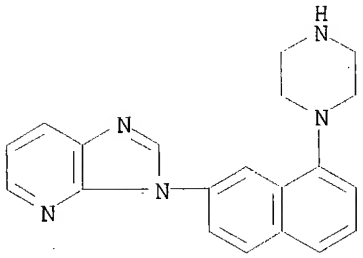
CI COM
SR CA
LC STN Files: CA, CAPLUS



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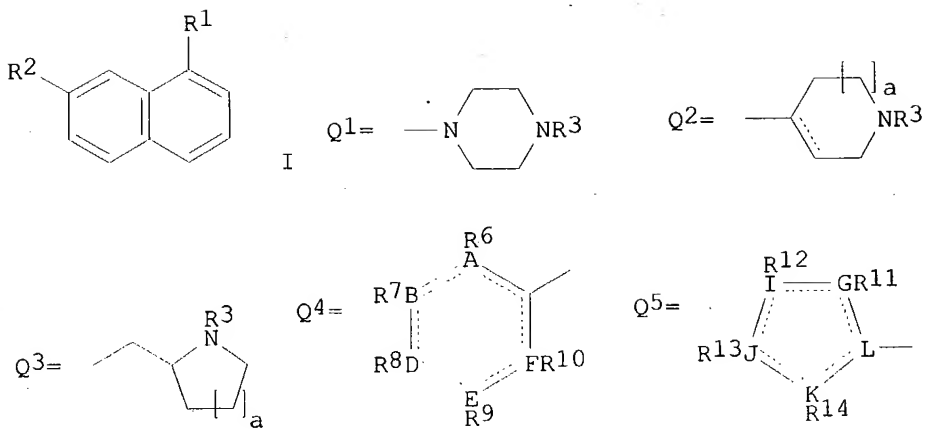
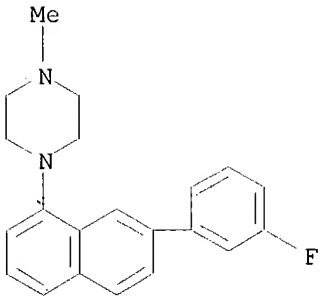


AB Title compds. [I; R1 = Q1-Q3, etc.; R2 = R4, OR4, OS(O)2R4, NR4R5, R4(CH2)bNH(C:X)(CH2)c, R4(CH2)bO(C:O)NH(CH2)c(C:O)NH, R4(C:O)NH(C:O)NH, (CH2)bNH(C:X)(CH2)bO(C:O)(CH2)cR4, NH(C:X)NHR4, R4O(C:O)O, O(C:O)NHR4, R4O(C:O)NH, (CH2)b(C:O)(CH2)cR4, NHS(O)2R4, C(OH)R4R5, CH(OH)R4, (C:O)NR4R5, CN, NO2, substituted alkyl, (substituted) alkenyl, alkynyl; R3 = H, alkyl, alkylaryl, aryl; R4, R5 = Q4, Q5, H, CF3, alkyl, alkylaryl, etc.; R6-R14 = H, halo, CF3, CN, NO2, aryl, alkylaryl, alkyl, alkenyl, alkynyl, OR20, COR20, NR20R21, etc.; adjacent pairs of R6-R14 = atoms to form 5-7 membered rings; R20, R21 = H, alkyl, aryl, alkylaryl; R20R21 = atoms to form 4-7 membered rings; A, B, D, E, F, L = C, N; G, I, J, K = C, N, O, S, C:O; X = O, S; a = 0-2; b, c = 0-6; dotted line = optional double bond; with provisos], were prepd. These compds. are useful psychotherapeutics and are potent serotonin (5-HT1) agonists and antagonists and may be used in the treatment of depression, anxiety, eating disorders, obesity, drug abuse, cluster headache, migraine, pain and chronic paroxysmal hemicrania and headache assocd. with vascular disorders, and other disorders arising from deficient serotonergic neurotransmission. The compds. can also be used as centrally acting antihypertensives and vasodilators. Thus, 7-amino-.alpha.-tetralone was stirred with PhCOCl/Et3N in THF to give 85% 7-benzamido-.alpha.-tetralone. This in THF at -78.degree. was treated with N-methylpiperazine and TiCl4 to give 83% 7-benzamido-1-(4-methyl-1-piperazinyl)-3,4-dihydronaphthalene. The latter was refluxed with Pd/C in xylene to give title compd. 7-benzamido-1-(4-methyl-1-piperazinyl)naphthalene and 7-benzamido-1-(4-methyl-1-piperazinyl)-1,2,3,4-tetrahydronaphthalene. I showed IC50 <0.60 nM for 5-HT1A and/or 5-HT1D affinity.

L22 ANSWER 12 OF 30 REGISTRY COPYRIGHT 1999 ACS
RN 163465-38-1 REGISTRY
CN Piperazine, 1-[7-(3-fluorophenyl)-1-naphthalenyl]-4-methyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C21 H21 F N2
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



2 REFERENCES IN FILE CA (1967 TO DATE)
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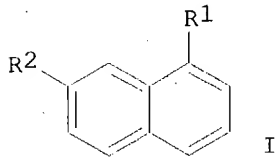

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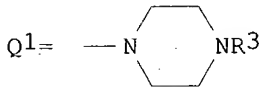

AB Claimed is a pharmaceutical compn. contg. a 5-HT re-uptake inhibitor, a pharmaceutically acceptable carrier, and a compd. I [R1 = Q1, etc.; R2 = R4, etc.; R4 = H, CF3, alkyl, alkylaryl, etc.; a proviso is given; R3 = H, alkyl, aryl, etc.]. Compds. I were assayed for 5-HT1A and 5-HT1D affinity and showed IC50 values of less than 0.6 .mu.M for at least one of said affinities. 7-Benzamido-1-(4-methyl-1-piperazinyl)naphthalene was prepd. in several steps from .7-amino-.alpha.-tetralone.

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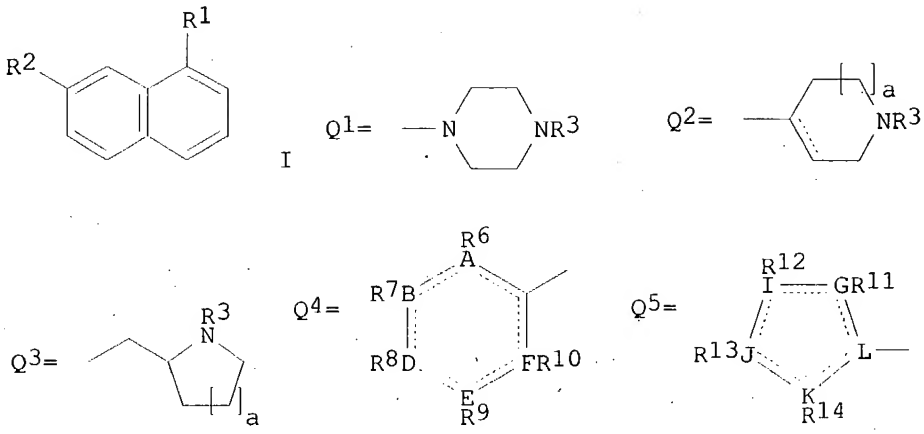

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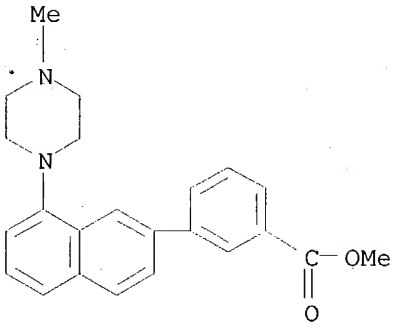
L22 ANSWER 13 OF 30 REGISTRY COPYRIGHT 1999 ACS
RN 163465-37-0 REGISTRY
CN Benzoic acid, 3-[8-(4-methyl-1-piperazinyl)-2-naphthalenyl]-, methyl ester (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C23 H24 N2 O2
CI COM
SR CA

LC STN Files: CA, CAPLUS, USPATFULL



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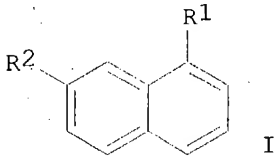

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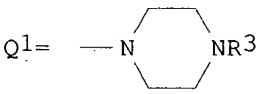

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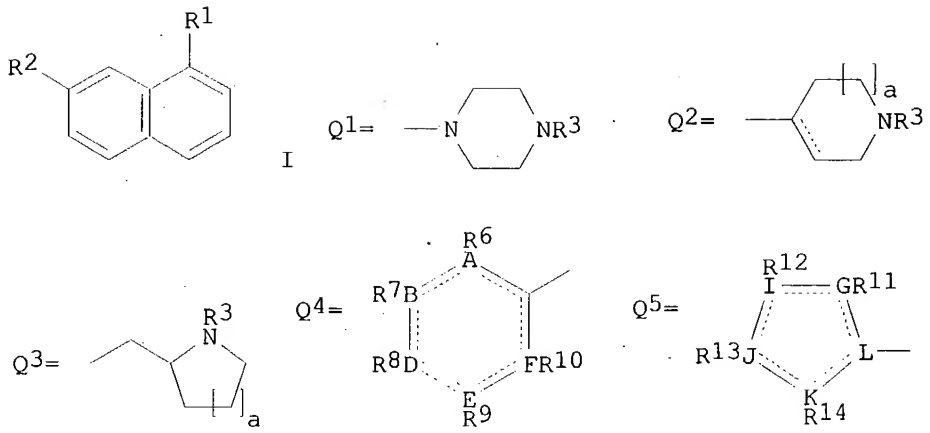

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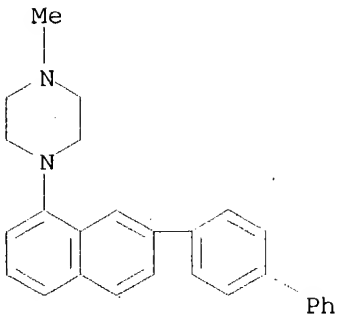
L22 ANSWER 14 OF 30 REGISTRY COPYRIGHT 1999 ACS
RN 163465-36-9 REGISTRY
CN Piperazine, 1-(7-[1,1'-biphenyl]-4-yl-1-naphthalenyl)-4-methyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C27 H26 N2
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



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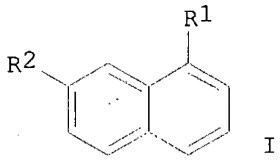

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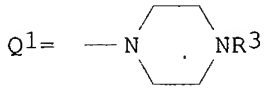

AB Claimed is a pharmaceutical compn. contg. a 5-HT re-uptake inhibitor, a pharmaceutically acceptable carrier, and a compd. I [R1 = Q1, etc.; R2 = R4, etc.; R4 = H, CF3, alkyl, alkylaryl, etc.; a proviso is given; R3 = H, alkyl, aryl, etc.]. Compds. I were assayed for 5-HT1A and 5-HT1D affinity and showed IC50 values of less than 0.6 .mu.M for at least one of said affinities. 7-Benzamido-1-(4-methyl-1-piperazinyl)naphthalene was prepd. in several steps from 7-amino-.alpha.-tetralone.

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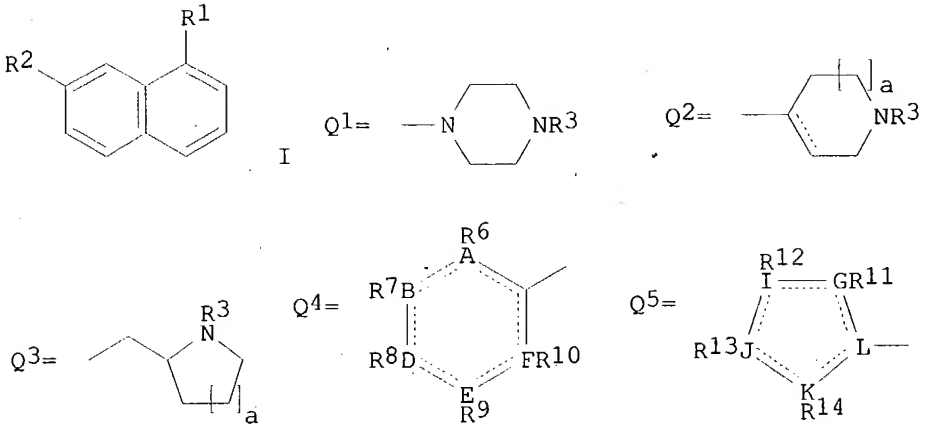

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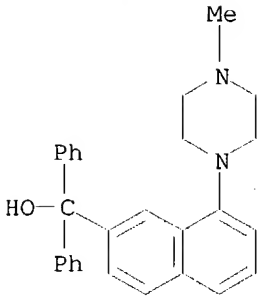
L22 ANSWER 15 OF 30 REGISTRY COPYRIGHT 1999 ACS
RN 163465-35-8 REGISTRY
CN 2-Naphthalenemethanol, 8-(4-methyl-1-piperazinyl)-.alpha.,.alpha.-diphenyl- (9CI) (CA INDEX NAME)
MF C28 H28 N2 O
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



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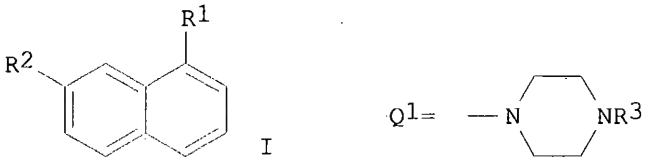

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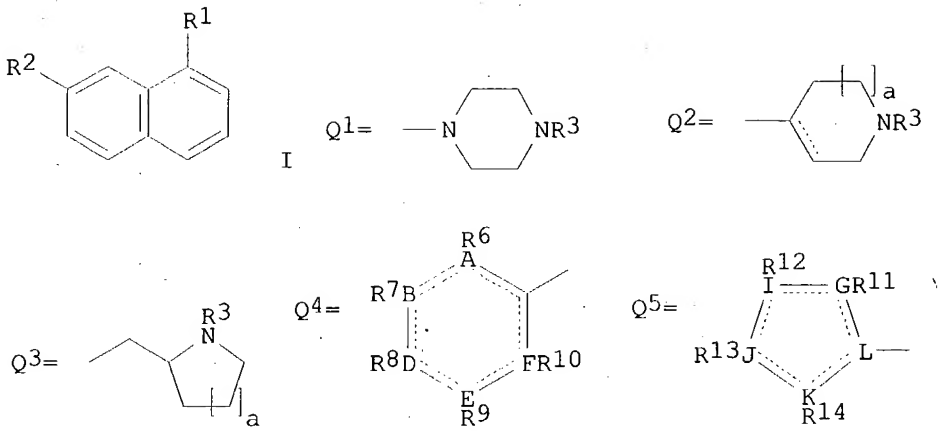
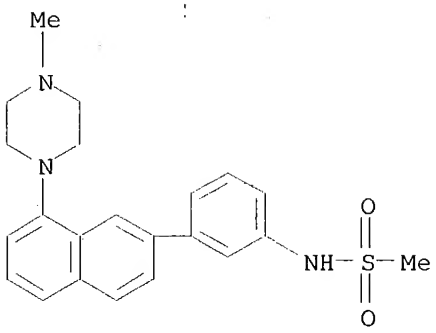


AB Title compds. [I; R1 = Q1-Q3, etc.; R2 = R4, OR4, OS(O)2R4, NR4R5, R4(CH2)bNH(C:X)(CH2)c, R4(CH2)bO(C:O)NH(CH2)c(C:O)NH, R4(C:O)NH(C:O)NH, (CH2)bNH(C:X)(CH2)bO(C:O)(CH2)cR4, NH(C:X)NHR4, R4O(C:O)O, O(C:O)NHR4, R4O(C:O)NH, (CH2)b(C:O)(CH2)cR4, NHS(O)2R4, C(OH)R4R5, CH(OH)R4, (C:O)NR4R5, CN, NO2, substituted alkyl, (substituted) alkenyl, alkynyl; R3 = H, alkyl, alkylaryl, aryl; R4, R5 = Q4, Q5, H, CF3, alkyl, alkylaryl, etc.; R6-R14 = H, halo, CF3, CN, NO2, aryl, alkylaryl, alkyl, alkenyl, alkynyl, OR20, COR20, NR20R21, etc.; adjacent pairs of R6-R14 = atoms to form 5-7 membered rings; R20, R21 = H, alkyl, aryl, alkylaryl; R20R21 = atoms to form 4-7 membered rings; A, B, D, E, F, L = C, N; G, I, J, K = C, N, O, S, C:O; X = O, S; a = 0-2; b, c = 0-6; dotted line = optional double bond; with provisos], were prepd. These compds. are useful psychotherapeutics and are potent serotonin (5-HT1) agonists and antagonists and may be used in the treatment of depression, anxiety, eating disorders, obesity, drug abuse, cluster headache, migraine, pain and chronic paroxysmal hemicrania and headache assocd. with vascular disorders, and other disorders arising from deficient serotonergic neurotransmission. The compds. can also be used as centrally acting antihypertensives and vasodilators. Thus, 7-amino-.alpha.-tetralone was stirred with PhCOCl/Et3N in THF to give 85% 7-benzamido-.alpha.-tetralone. This in THF at -78.degree. was treated with N-methylpiperazine and TiCl4 to give 83% 7-benzamido-1-(4-methyl-1-piperazinyl)-3,4-dihydronaphthalene. The latter was refluxed with Pd/C in xylene to give title compd. 7-benzamido-1-(4-methyl-1-piperazinyl)naphthalene and 7-benzamido-1-(4-methyl-1-piperazinyl)-1,2,3,4-tetrahydronaphthalene. I showed IC50 <0.60 nM for 5-HT1A and/or 5-HT1D affinity.

L22 ANSWER 16 OF 30 REGISTRY COPYRIGHT 1999 ACS
RN 163465-33-6 REGISTRY
CN Methanesulfonamide, N-[3-[8-(4-methyl-1-piperazinyl)-2-naphthalenyl]phenyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C22 H25 N3 O2 S
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



2 REFERENCES IN FILE CA (1967 TO DATE)
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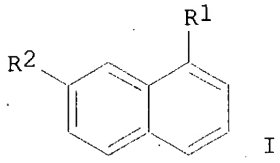

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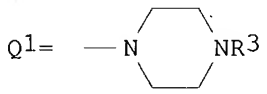

AB Claimed is a pharmaceutical compn. contg. a 5-HT re-uptake inhibitor, a pharmaceutically acceptable carrier, and a compd. I [R1 = Q1, etc.; R2 = R4, etc.; R4 = H, CF3, alkyl, alkylaryl, etc.; a proviso is given; R3 = H, alkyl, aryl, etc.]. Compds. I were assayed for 5-HT1A and 5-HT1D affinity and showed IC50 values of less than 0.6 .mu.M for at least one of said affinities. 7-Benzamido-1-(4-methyl-1-piperazinyl)naphthalene was prepd. in several steps from 7-amino-.alpha.-tetralone.

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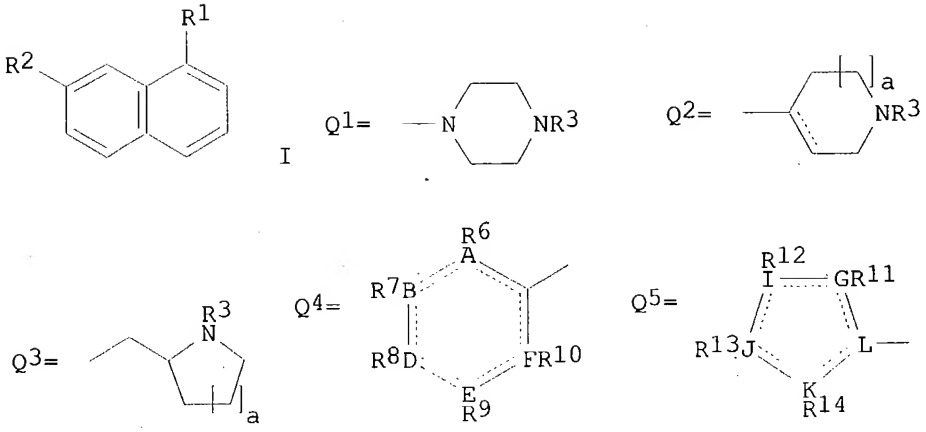

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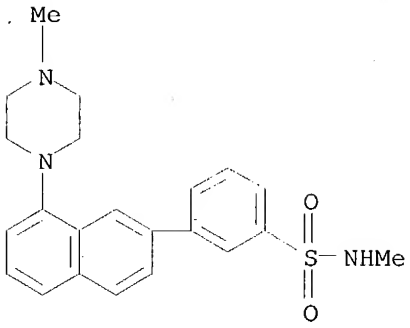
L22 ANSWER 17 OF 30 REGISTRY COPYRIGHT 1999 ACS
RN 163465-32-5 REGISTRY
CN Benzenesulfonamide, N-methyl-3-[8-(4-methyl-1-piperazinyl)-2-naphthalenyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C22 H25 N3 O2 S
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



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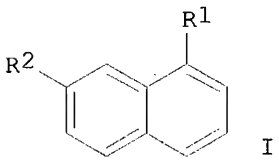

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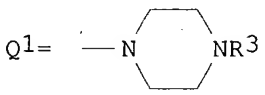

AB Claimed is a pharmaceutical compn. contg. a 5-HT re-uptake inhibitor, a pharmaceutically acceptable carrier, and a compd. I [R1 = Q1, etc.; R2 = R4, etc.; R4 = H, CF3, alkyl, alkylaryl, etc.; a proviso is given; R3 = H, alkyl, aryl, etc.]. Compds. I were assayed for 5-HT1A and 5-HT1D affinity and showed IC50 values of less than 0.6 .mu.M for at least one of said affinities. 7-Benzamido-1-(4-methyl-1-piperazinyl)naphthalene was prepd. in several steps from 7-amino-.alpha.-tetralone.

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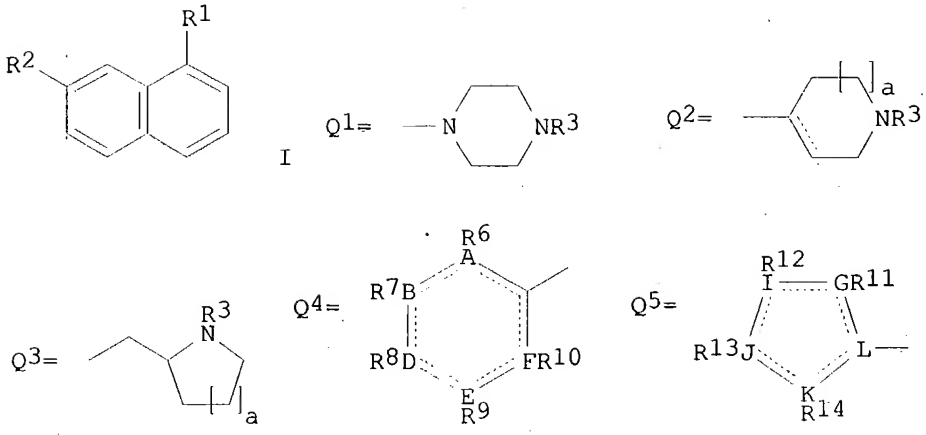

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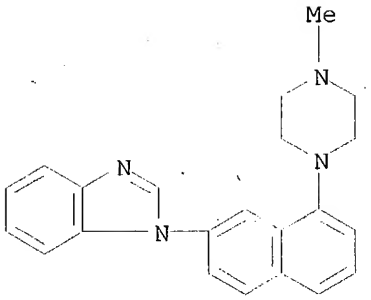
L22 ANSWER 18 OF 30 REGISTRY COPYRIGHT 1999 ACS
RN 163465-26-7 REGISTRY
CN 1H-Benzimidazole, 1-[8-(4-methyl-1-piperazinyl)-2-naphthalenyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C22 H22 N4
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

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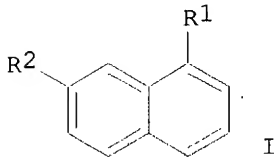

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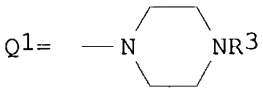

AB Claimed is a pharmaceutical compn. contg. a 5-HT re-uptake inhibitor, a pharmaceutically acceptable carrier, and a compd. I [R1 = Q1, etc.; R2 = R4, etc.; R4 = H, CF3, alkyl, alkylaryl, etc.; a proviso is given; R3 = H, alkyl, aryl, etc.]. Compds. I were assayed for 5-HT1A and 5-HT1D affinity and showed IC50 values of less than 0.6 .mu.M for at least one of said affinities. 7-Benzamido-1-(4-methyl-1-piperazinyl)naphthalene was prepd. in several steps from 7-amino-.alpha.-tetralone.

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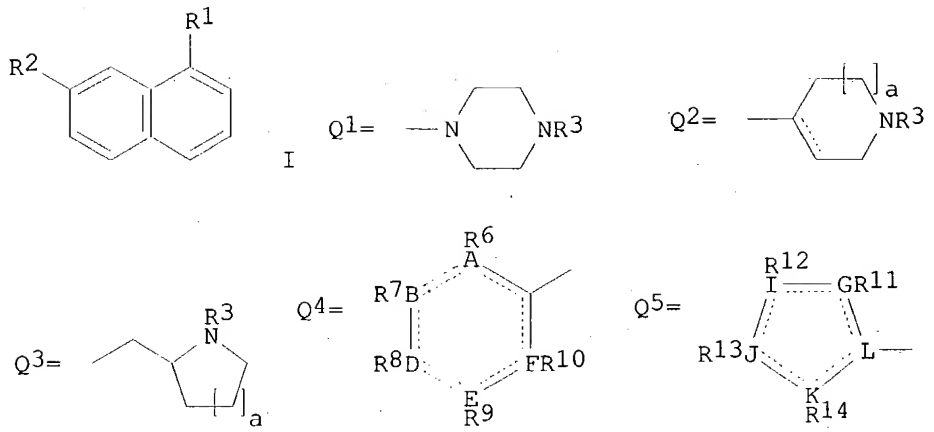

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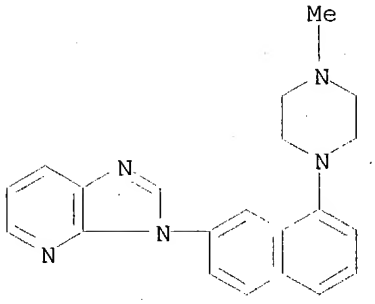
L22 ANSWER 19 OF 30 REGISTRY COPYRIGHT 1999 ACS
RN 163465-25-6 REGISTRY
CN 3H-Imidazo[4,5-b]pyridine, 3-[8-(4-methyl-1-piperazinyl)-2-naphthalenyl]-(9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C21 H21 N5
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



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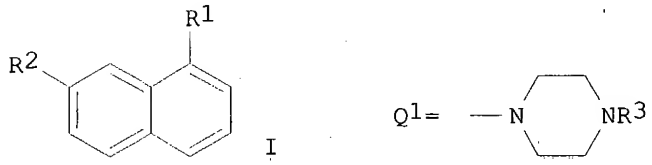

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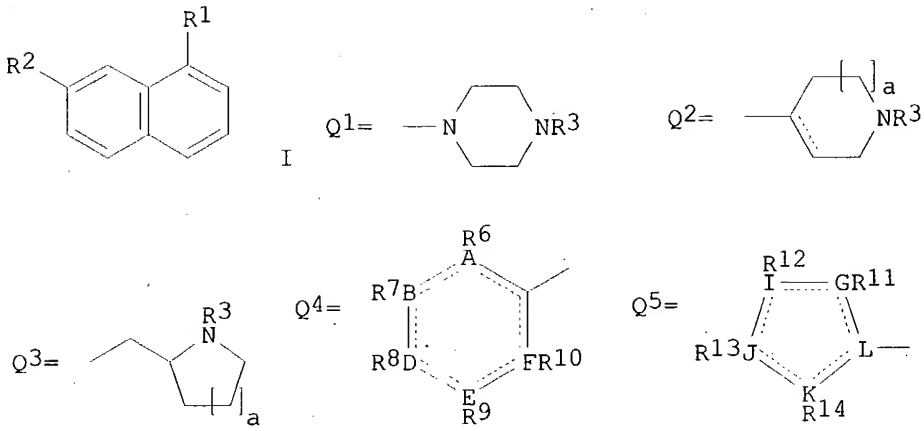
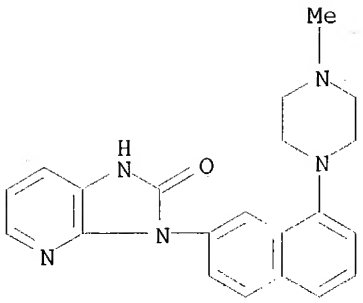


AB Title compds. [I; R1 = Q1-Q3, etc.; R2 = R4, OR4, OS(O)2R4, NR4R5, R4(CH2)bNH(C:X)(CH2)c, R4(CH2)bO(C:O)NH(CH2)c(C:O)NH, R4(C:O)NH(C:O)NH, (CH2)bNH(C:X)(CH2)bO(C:O)(CH2)cR4, NH(C:X)NHR4, R4O(C:O)O, O(C:O)NHR4, R4O(C:O)NH, (CH2)b(C:O)(CH2)cR4, NHS(O)2R4, C(OH)R4R5, CH(OH)R4, (C:O)NR4R5, CN, NO2, substituted alkyl, (substituted) alkenyl, alkynyl; R3 = H, alkyl, alkylaryl, aryl; R4, R5 = Q4, Q5, H, CF3, alkyl, alkylaryl, etc.; R6-R14 = H, halo, CF3, CN, NO2, aryl, alkylaryl, alkyl, alkenyl, alkynyl, OR20, COR20, NR20R21, etc.; adjacent pairs of R6-R14 = atoms to form 5-7 membered rings; R20, R21 = H, alkyl, aryl, alkylaryl; R20R21 = atoms to form 4-7 membered rings; A, B, D, E, F, L = C, N; G, I, J, K = C, N, O, S, C:O; X = O, S; a = 0-2; b, c = 0-6; dotted line = optional double bond; with provisos], were prepd. These compds. are useful psychotherapeutics and are potent serotonin (5-HT1) agonists and antagonists and may be used in the treatment of depression, anxiety, eating disorders, obesity, drug abuse, cluster headache, migraine, pain and chronic paroxysmal hemicrania and headache assocd. with vascular disorders, and other disorders arising from deficient serotonergic neurotransmission. The compds. can also be used as centrally acting antihypertensives and vasodilators. Thus, 7-amino-.alpha.-tetralone was stirred with PhCOCl/Et3N in THF to give 85% 7-benzamido-.alpha.-tetralone. This in THF at -78.degree. was treated with N-methylpiperazine and TiCl4 to give 83% 7-benzamido-1-(4-methyl-1-piperazinyl)-3,4-dihydronaphthalene. The latter was refluxed with Pd/C in xylene to give title compd. 7-benzamido-1-(4-methyl-1-piperazinyl)naphthalene and 7-benzamido-1-(4-methyl-1-piperazinyl)-1,2,3,4-tetrahydronaphthalene. I showed IC50 <0.60 nM for 5-HT1A and/or 5-HT1D affinity.

L22 ANSWER 20 OF 30 REGISTRY COPYRIGHT 1999 ACS
RN 163465-23-4 REGISTRY
CN 2H-Imidazo[4,5-b]pyridin-2-one, 1,3-dihydro-3-[8-(4-methyl-1-piperazinyl)-2-naphthalenyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C21 H21 N5 O
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 124:343334 Novel compositions containing sertraline and a 5-HT1D receptor agonist or antagonist. Chenard, Bertrand L.; Howard, Harry R.; Macor, John E.; Schulz, David W.; Sprouse, Jeffrey S. (Pfizer Inc., USA). Eur. Pat. Appl. EP 701819 A2 19960320, 51 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE. (English). CODEN: EPXXDW. APPLICATION: EP 95-306249 19950907. PRIORITY: US 94-306230 19940914.

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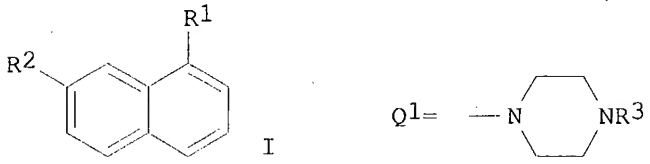

AB Claimed is a pharmaceutical compn. contg. a 5-HT re-uptake inhibitor, a pharmaceutically acceptable carrier, and a compd. I [R1 = Q1, etc.; R2 = R4, etc.; R4 = H, CF3, alkyl, alkylaryl, etc.; a proviso is given; R3 = H, alkyl, aryl, etc.]. Compds. I were assayed for 5-HT1A and 5-HT1D affinity and showed IC50 values of less than 0.6 .mu.M for at least one of said affinities. 7-Benzamido-1-(4-methyl-1-piperazinyl)naphthalene was prepd. in several steps from 7-amino-.alpha.-tetralone.

REFERENCE 2: 122:314570 Preparation of heterocyclylnaphthalene derivatives as serotonin 5-HT1 agonists and antagonists.. Chenard, Bertrand L.; Macor, John E.; Segelstein, Barbara E. (Pfizer Inc., USA). PCT Int. Appl. WO 9421619 A1 19940929, 85 pp. DESIGNATED STATES: W: AU, BR, CA, CN, CZ, JP, KR, NO, NZ, PL, RU, US; RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE. (English). CODEN: PIXXD2. APPLICATION: WO 94-US1206 19940215. PRIORITY: US 93-32042 19930316.

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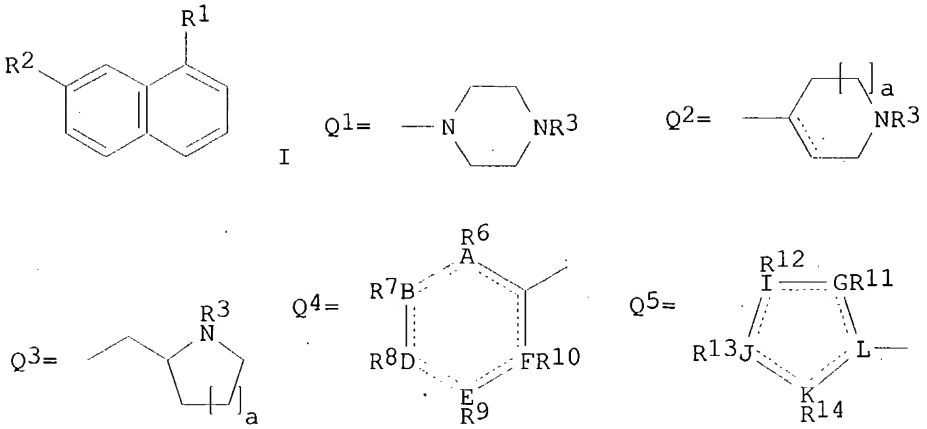
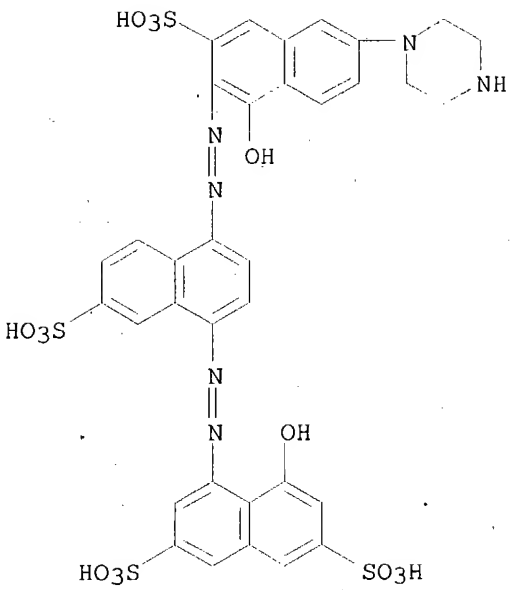


AB Title compds. [I; R1 = Q1-Q3, etc.; R2 = R4, OR4, OS(O)2R4, NR4R5, R4(CH2)bNH(C:X)(CH2)c, R4(CH2)bO(C:O)NH(CH2)c(C:O)NH, R4(C:O)NH(C:O)NH, (CH2)bNH(C:X)(CH2)bO(C:O)(CH2)cR4, NH(C:X)NHR4, R4O(C:O)O, O(C:O)NHR4, R4O(C:O)NH, (CH2)b(C:O)(CH2)cR4, NHS(O)2R4, C(OH)R4R5, CH(OH)R4, (C:O)NR4R5, CN, NO2, substituted alkyl, (substituted) alkenyl, alkynyl; R3 = H, alkyl, alkylaryl, aryl; R4, R5 = Q4, Q5, H, CF3, alkyl, alkylaryl, etc.; R6-R14 = H, halo, CF3, CN, NO2, aryl, alkylaryl, alkyl, alkenyl, alkynyl, OR20, COR20, NR20R21, etc.; adjacent pairs of R6-R14 = atoms to form 5-7 membered rings; R20, R21 = H, alkyl, aryl, alkylaryl; R20R21 = atoms to form 4-7 membered rings; A, B, D, E, F, L = C, N; G, I, J, K = C, N, O, S, C:O; X = O, S; a = 0-2; b, c = 0-6; dotted line = optional double bond; with provisos], were prepd. These compds. are useful psychotherapeutics and are potent serotonin (5-HT1) agonists and antagonists and may be used in the treatment of depression, anxiety, eating disorders, obesity, drug abuse, cluster headache, migraine, pain and chronic paroxysmal hemicrania and headache assocd. with vascular disorders, and other disorders arising from deficient serotonergic neurotransmission. The compds. can also be used as centrally acting antihypertensives and vasodilators. Thus, 7-amino-.alpha.-tetralone was stirred with PhCOCl/Et3N in THF to give 85% 7-benzamido-.alpha.-tetralone. This in THF at -78.degree. was treated with N-methylpiperazine and TiCl4 to give 83% 7-benzamido-1-(4-methyl-1-piperazinyl)-3,4-dihydronaphthalene. The latter was refluxed with Pd/C in xylene to give title compd. 7-benzamido-1-(4-methyl-1-piperazinyl)naphthalene and 7-benzamido-1-(4-methyl-1-piperazinyl)-1,2,3,4-tetrahydronaphthalene. I showed IC50 <0.60 nM for 5-HT1A and/or 5-HT1D affinity.

L22 ANSWER 21 OF 30 REGISTRY COPYRIGHT 1999 ACS
RN 162459-90-7 REGISTRY
CN 2,7-Naphthalenedisulfonic acid, 4-hydroxy-5-[[4-[[1-hydroxy-6-(1-piperazinyl)-3-sulfo-2-naphthalenyl]azo]-7-sulfo-1-naphthalenyl]azo]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C34 H28 N6 O14 S4
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



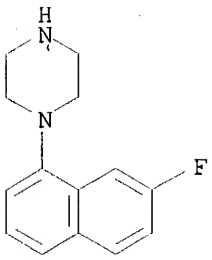
1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 123:202029 Reactive azo dyes, their preparation and their use. Kunde, Klaus (Bayer A.-G., Germany). Eur. Pat. Appl. EP 622424 A1 19941102, 33 pp. DESIGNATED STATES: R: CH, DE, FR, GB, LI. (German). CODEN: EPXXDW. APPLICATION: EP 94-105981 19940418. PRIORITY: DE 93-4314300 19930430.

GI For diagram(s), see printed CA Issue.

AB The dyes (I; A = optionally substituted 1,4-phenylene or -naphthylene; R1, R2 = H, optionally substituted alkyl or phenyl; Z = connecting group; R1ZR2 = optionally substitued 1,4-piperazinediyl; X = fiber-reactive group) are obtained from the appropriate azo compds. (prepd. by conventional coupling) and chlorohalotriazine derivs. I have very good wetfastness on cellulosics. Thus, H acid O-benzenesulfonate.fwdarw.2-methoxy-5-methylaniline.fwdarw.7-(2-aminoethylamino)-4-hydroxy-2-naphthalenesulfonic acid was prepd. and condensed with cyanuric fluoride and 2-amino-1,4-benzenedisulfonic acid to give a product which dyed cotton and rayon blue.

L22 ANSWER 22 OF 30 REGISTRY COPYRIGHT 1999 ACS
RN 126653-08-5 REGISTRY
CN Piperazine, 1-(7-fluoro-1-naphthalenyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C14 H15 F N2
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 112:198420 Preparation of phenyl(piperazinylalkyl)pyrimidinedio
nes as serotoninergic antagonists. Frost, Jonathan; Gaudilliere, Bernard;
Rousseau, Jean; Dupont, Regis; Manoury, Philippe; Obitz, Daniel (Synthelabo S. A., Fr.). Eur. Pat. Appl. EP 343050 A1 19891123, 18 pp.
DESIGNATED STATES: R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE.
(French). CODEN: EPXXDW. APPLICATION: EP 89-401330 19890512. PRIORITY: FR 88-6568 19880517.

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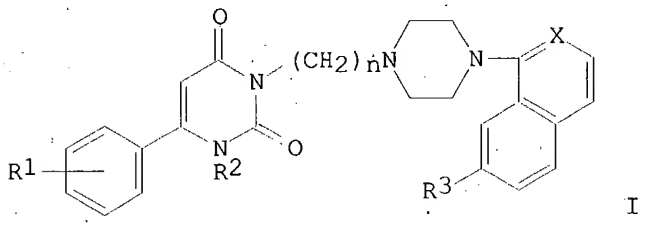
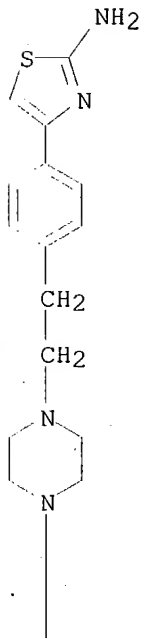


I

AB The title compds. [I; R1 = H, halo, Me, MeO; R2 = H, alkyl, PhCH2; n = 2-4; X = CH, N; R3 = H, halo, MeO] and their pharmaceutical acceptable salts, useful as serotoninergic antagonists, are prepd., e.g., by alkylation of the appropriate piperazine deriv. with 3-(chloroalkyl)pyrimidinediones. 3-(2-Chloroethyl)-1-methyl-6-phenyl-2,4-(1H,3H)-pyrimidinedione (prepn. given) was refluxed with 1-(1-naphthyl)piperazine in MeOH for 8 h to give I [X = CH; R1 = R3 = H; R2 = Me; n = 2]. I inhibited the activity of [3H]-8-hydroxy-2-(dipropylamino)tetralin's affinity for the 5-11 T1A-type serotoninergic receptors of the hippocampus of rats with an IC50 of 0.001-0.1 .mu.M.

L22 ANSWER 23 OF 30 REGISTRY COPYRIGHT 1999 ACS
RN 117923-11-2 REGISTRY
CN 2-Thiazolamine, 4-[4-[2-[4-(6-chloro-1-naphthalenyl)-1-piperazinyl]ethyl]phenyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C25 H25 Cl N4 S
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

PAGE 1-A



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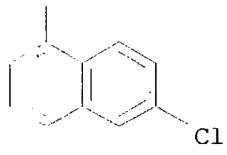
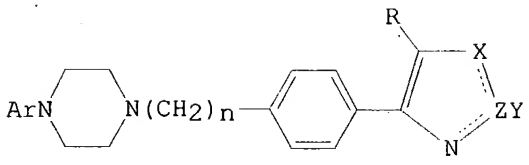


2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 110:173259 Preparation of arylpiperazine derivatives as psychotropic agents. Loe, John Adams (Pfizer Corp., USA). Faming Zhuanli Shenqing Gongkai Shuomingshu CN 88100986 A 19880921, 28 pp. (Chinese). CODEN: CNXXEV. APPLICATION: CN 88-100986 19880215.

GI



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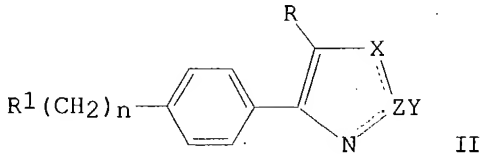

II

AB Arylpiperazine derivs. [I; Ar = Ph, 3-(F3C)C6H4, naphthyl, etc.; R = H, C1-3 alkyl; X = N, S, O; ZY = CH, COH, CSH, CNH2, or N, etc., but when ZY = N, X .noteq. O; n = 2-4], useful as psychotropic agents (no data), are prepd. by substitution of N-arylpiperazine with aralkyl halides II (R1 = halo). Br was added to a soln. of 4-(MeCO)C6H4CH2CH2Cl in HOAc at room temp. with stirring to give an oil which was treated with thiourea in Me2CO to give 51% thiazole deriv. II.HBr (R = H, R1 = Cl, X = S, ZY = CNH2, n = 2), which was refluxed with N-1-naphthylpiperazine, Et3N, Na2CO3, and NaI in EtOH to give 31% I (Ar= 1-naphthyl, R = H, X = S, Zy = CNH2, n = 2).

REFERENCE 2: 110:8234 Preparation of 1-aryl-4-(4-heterocyclylphenyl)piperazines as antipsychotics. Lowe, John Adams, III (Pfizer Inc., USA). Eur. Pat. Appl. EP 279598 A2 19880824, 23 pp.
DESIGNATED STATES: R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE.
(English). CODEN: EPXXDW. APPLICATION: EP 88-301171 19880212.
PRIORITY:
WO 87-US340 19870217.
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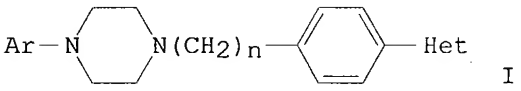


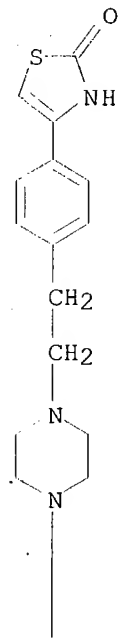
I

AB The title compds. [I; Ar = Ph, 3-F3CC6H4, 3-NCC6H4, naphthyl, (substituted) heterocyclyl; Het = (substituted) imidazolyl, oxazolyl, thiazolyl, thiadiazolyl, triazolyl; n = 2, 3, 4] useful as antipsychotics (no data), were prepd. A soln. of AcCl and AlCl3 in ethylene dichloride was added to PhCH2CH2Cl in ethylene dichloride. The mixt. was stirred at room temp. to give 4-(2-chloroethyl)acetophenone. The latter in AcOH was treated with Br and the product was cyclocondensed with H2NCSNH2 to give 4-[4-(2-chloroethyl)phenyl]-2-aminothiazole-HBr. The latter was stirred with N-(1-naphthyl)piperazine, Et3N, Na2CO3, and NaI in EtOH at room temp.
for 5 d to give 4-[4-[2-[4-(1-naphthyl)piperazinyl]ethyl]phenyl]-2-aminothiazole.

L22 ANSWER 24 OF 30 REGISTRY COPYRIGHT 1999 ACS
RN 117923-10-1 REGISTRY
CN 2(3H)-Thiazolone, 4-[4-[2-[4-(6-fluoro-1-naphthalenyl)-1-

piperazinyl]ethyl]phenyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C25 H24 F N3 O S
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

PAGE 1-A



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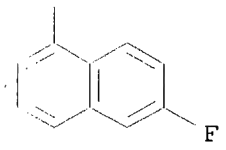
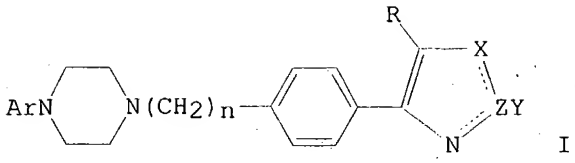


2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 110:173259 Preparation of arylpiperazine derivatives as psychotropic agents. Loe, John Adams (Pfizer Corp., USA). Faming Zhuanli
Shenqing Gongkai Shuomingshu CN 88100986 A 19880921, 28 pp. (Chinese).
CODEN: CNXXEV. APPLICATION: CN 88-100986 19880215.
GI



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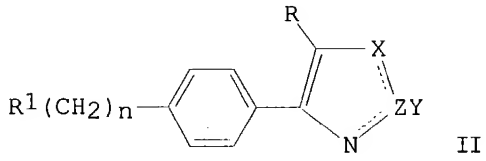

II

AB Arylpiperazine derivs. [I; Ar = Ph, 3-(F3C)C6H4, naphthyl, etc.; R = H, C1-3 alkyl; X = N, S, O; ZY = CH, COH, CSH, CNH2, or N, etc., but when ZY = N, X .noteq. O; n = 2-4], useful as psychotropic agents (no data), are prepd. by substitution of N-arylpiperazine with aralkyl halides II (R1 = halo). Br was added to a soln. of 4-(MeCO)C6H4CH2CH2Cl in HOAc at room temp. with stirring to give an oil which was treated with thiourea in Me2CO to give 51% thiazole deriv. II.HBr (R = H, R1 = Cl, X = S, ZY = CNH2, n = 2), which was refluxed with N-1-naphthylpiperazine, Et3N, Na2CO3, and NaI in EtOH to give 31% I (Ar= 1-naphthyl, R = H, X = S, Zy = CNH2, n = 2).

REFERENCE 2: 110:8234 Preparation of 1-aryl-4-(4-heterocyclylphenyl)piperazines as antipsychotics. Lowe, John Adams, III (Pfizer Inc., USA). Eur. Pat. Appl. EP 279598 A2 19880824, 23 pp. DESIGNATED STATES: R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE.
(English). CODEN: EPXXDW. APPLICATION: EP 88-301171 19880212.
PRIORITY:
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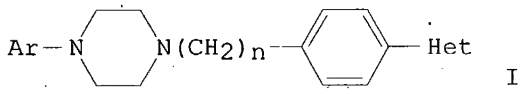

I

AB The title compds. [I; Ar = Ph, 3-F3CC6H4, 3-NCC6H4, naphthyl, (substituted) heterocyclyl; Het = (substituted) imidazolyl, oxazolyl, thiazolyl, thiadiazolyl, triazolyl; n = 2, 3, 4] useful as antipsychotics (no data), were prepd. A soln. of AcCl and AlCl3 in ethylene dichloride was added to PhCH2CH2Cl in ethylene dichloride. The mixt. was stirred at room temp. to give 4-(2-chloroethyl)acetophenone. The latter in AcOH was treated with Br and the product was cyclocondensed with H2NCSNH2 to give 4-[4-(2-chloroethyl)phenyl]-2-aminothiazole-HBr. The latter was stirred with N-(1-naphthyl)piperazine, Et3N, Na2CO3, and NaI in EtOH at room temp.
for 5 d to give 4-[4-[2-[4-(1-naphthyl)piperazinyl]ethyl]phenyl]-2-aminothiazole.

L22 ANSWER 25 OF 30 REGISTRY COPYRIGHT 1999 ACS
RN 117923-09-8 REGISTRY
CN 2-Thiazolamine, 4-[4-[2-[4-(6-fluoro-1-naphthalenyl)-1-

piperazinyl]ethyl]phenyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
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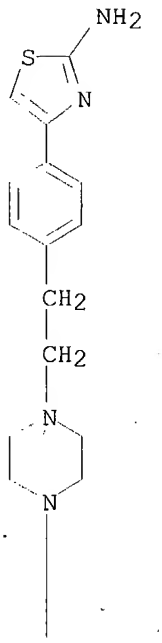
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

PAGE 1-A



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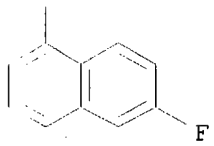
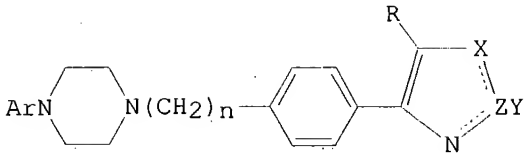


2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 110:173259 Preparation of arylpiperazine derivatives as psychotropic agents. Loe, John Adams (Pfizer Corp., USA). Faming Zhuanli Shenqing Gongkai Shuomingshu CN 88100986 A 19880921, 28 pp. (Chinese). CODEN: CNXXEV. APPLICATION: CN 88-100986 19880215.
GI



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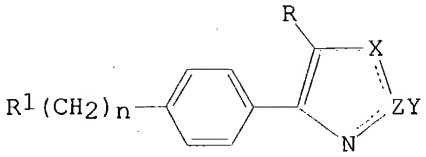
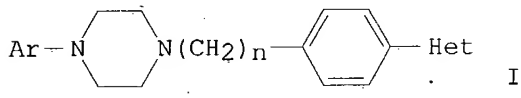


II

AB Arylpiperazine derivs. [I; Ar = Ph, 3-(F3C)C6H4, naphthyl, etc.; R = H, C1-3 alkyl; X = N, S, O; ZY = CH, COH, CSH, CNH2, or N, etc., but when ZY = N, X .noteq. O; n = 2-4], useful as psychotropic agents (no data), are prepd. by substitution of N-arylpiperazine with aralkyl halides II (R1 = halo). Br was added to a soln. of 4-(MeCO)C6H4CH2CH2Cl in HOAc at room temp. with stirring to give an oil which was treated with thiourea in Me2CO to give 51% thiazole deriv. II.HBr (R = H, R1 = Cl, X = S, ZY = CNH2, n = 2), which was refluxed with N-1-naphthylpiperazine, Et3N, Na2CO3, and NaI in EtOH to give 31% I (Ar= 1-naphthyl, R = H, X = S, Zy = CNH2, n = 2).

REFERENCE 2: 110:8234 Preparation of 1-aryl-4-(4-heterocyclylphenyl)piperazines as antipsychotics. Lowe, John Adams, III (Pfizer Inc., USA). Eur. Pat. Appl. EP 279598 A2 19880824, 23 pp. DESIGNATED STATES: R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE.
(English). CODEN: EPXXDW. APPLICATION: EP 88-301171 19880212.
PRIORITY:
WO 87-US340 19870217.
GI

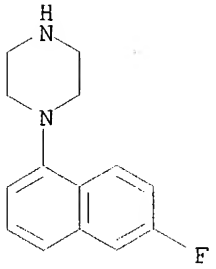


I

AB The title compds. [I; Ar = Ph, 3-F3CC6H4, 3-NCC6H4, naphthyl, (substituted) heterocyclyl; Het = (substituted) imidazolyl, oxazolyl, thiazolyl, thiadiazolyl, triazolyl; n = 2, 3, 4] useful as antipsychotics (no data), were prepd. A soln. of AcCl and AlCl3 in ethylene dichloride was added to PhCH2CH2Cl in ethylene dichloride. The mixt. was stirred at room temp. to give 4-(2-chloroethyl)acetophenone. The latter in AcOH was treated with Br and the product was cyclocondensed with H2NCSNH2 to give 4-[4-(2-chloroethyl)phenyl]-2-aminothiazole-HBr. The latter was stirred with N-(1-naphthyl)piperazine, Et3N, Na2CO3, and NaI in EtOH at room temp.
for 5 d to give 4-[4-[2-[4-(1-naphthyl)piperazinyl]ethyl]phenyl]-2-aminothiazole.

L22 ANSWER 26 OF 30 REGISTRY COPYRIGHT 1999 ACS
RN 117922-86-8 REGISTRY
CN Piperazine, 1-(6-fluoro-1-naphthalenyl)- (9CI) (CA INDEX NAME)

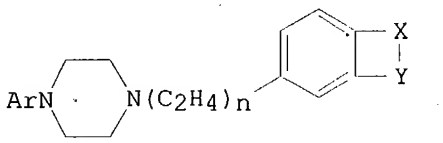
FS 3D CONCORD
MF C14 H15 F N2
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



4 REFERENCES IN FILE CA (1967 TO DATE)
4 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 111:153842 Neuroleptic arylpiperazinylalkyl-substituted heterocycles and their pharmaceutical compositions and use. Lowe, John A., III.; Nagel, Arthur A. (Pfizer Inc., USA). U.S. US 4831031 A 19890516, 9 pp. (English). CODEN: USXXAM. APPLICATION: US 88-146886 19880122.

GI



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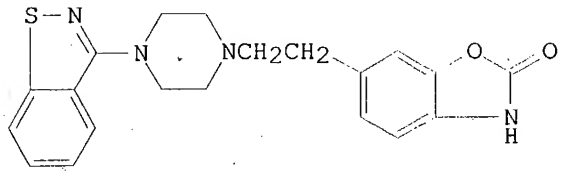


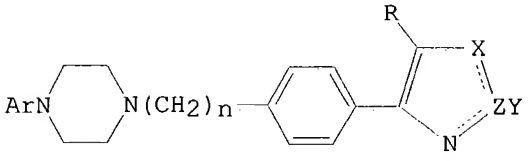
II

AB Title compds. I [Ar = benzothiazolyl, benzothiadiazolyl, benzotriazolyl, benzoxazolyl, benzoxazolonyl, indolyl, phthalazinyl, (un)substituted naphthyl, quinolyl, isoquinolyl, benzoisothiazolyl indanyl, 3-indazolyl; n = 1, 2; X and Y plus attached Ph = benzimidazolonyl, benzotriazolyl, (un)substituted quinolyl, benzothiazolyl, benzoisothiazolyl, indazolyl, indolyl, spiro[cyclopentaneindolinyl]] are prepd. as neuroleptics (no data). Benzoxazolone was acylated by BrCH2CO2H and polyphosphoric acid, and the bromoacetyl deriv. reduced by Et3SiH and CF3CO2H, to give 11% 6-(2-bromoethyl)benzoxazolone. Alkylation of N-(3-benzisothiazolyl)piperazine by the bromide in MIBK contg. Na2CO3 gave benzoxazolone II.

REFERENCE 2: 110:173259 Preparation of arylpiperazine derivatives as psychotropic agents. Loe, John Adams (Pfizer Corp., USA). Faming Zhuanli Shenqing Gongkai Shuomingshu CN 88100986 A 19880921, 28 pp. (Chinese).

CODEN: CNXXEV. APPLICATION: CN 88-100986 19880215.

GI



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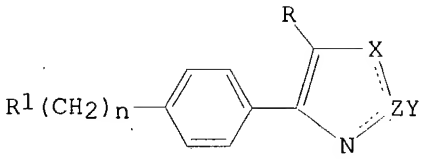

II

AB Arylpiperazine derivs. [I; Ar = Ph, 3-(F3C)C6H4, naphthyl, etc.; R = H, C1-3 alkyl; X = N, S, O; ZY = CH, COH, CSH, CNH2, or N, etc., but when ZY = N, X .noteq. O; n = 2-4], useful as psychotropic agents (no data), are prepd. by substitution of N-arylpiperazine with aralkyl halides II (R1 = halo). Br was added to a soln. of 4-(MeCO)C6H4CH2CH2Cl in HOAc at room temp. with stirring to give an oil which was treated with thiourea in Me2CO to give 51% thiazole deriv. II.HBr (R = H, R1 = Cl, X = S, ZY = CNH2, n = 2), which was refluxed with N-1-naphthylpiperazine, Et3N, Na2CO3, and NaI in EtOH to give 31% I (Ar= 1-naphthyl, R = H, X = S, Zy = CNH2, n = 2).

REFERENCE 3: 110:39024 Preparation of (heterocyclophenylalkyl)piperazinylare
nes as antipsychotics. Lowe, John Adams, III; Nagel, Arthur Adam (Pfizer Inc., USA). Eur. Pat. Appl. EP 281309 A1 19880907, 13 pp. DESIGNATED STATES: R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE. (English). CODEN: EPXXDW. APPLICATION: EP 88-301561 19880224.
PRIORITY:
WO 87-US423 19870302.

GI For diagram(s), see printed CA Issue.

AB The title compds. [I; Ar = (substituted) naphthyl, quinolyl, isoquinolyl, quinazolyl, benzisothiazolyl, indolyl, indanyl, etc.; X, Y = atoms to complete quinolyl, benzothiazolyl, indazolyl, indolyl, oxindolyl, benzoxazolyl benzimidazolonyl, benzotriazolyl rings, etc.; n = 1,2] useful
as antipsychotics (no data) were prepd. A mixt. of benzoxazolone and BrCH2CO2H in polyphosphoric acid was stirred at 115.degree. for 2-5 h and the product was treated with CF3CO2H and then Et3SiH. The mixt. was stirred overnight at room temp. to give 11% 6-(2-bromoethyl)benzoxazolone.
The latter was refluxed with N-(1-naphthyl)piperazine, NaI, and Et3N in EtOH for 3 days to give 23% 6-[2-[4-(1-naphthyl)piperazinyl]ethyl]benzoxaz
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REFERENCE 4: 110:8234 Preparation of 1-aryl-4-(4-heterocyclylphenyl)piperazines as antipsychotics. Lowe, John Adams, III (Pfizer Inc., USA). Eur. Pat. Appl. EP 279598 A2 19880824, 23 pp. DESIGNATED STATES: R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE.
(English). CODEN: EPXXDW. APPLICATION: EP 88-301171 19880212.
PRIORITY:

WO 87-US340 19870217.

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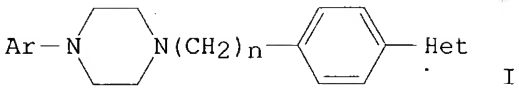
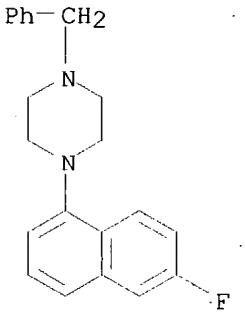


I

AB The title compds. [I; Ar = Ph, 3-F3CC6H4, 3-NCC6H4, naphthyl, (substituted) heterocyclyl; Het = (substituted) imidazolyl, oxazolyl, thiazolyl, thiadiazolyl, triazolyl; n = 2, 3, 4] useful as antipsychotics (no data), were prepd. A soln. of AcCl and AlCl3 in ethylene dichloride was added to PhCH2CH2Cl in ethylene dichloride. The mixt. was stirred at room temp. to give 4-(2-chloroethyl)acetophenone. The latter in AcOH was treated with Br and the product was cyclocondensed with H2NCSNH2 to give 4-[4-(2-chloroethyl)phenyl]-2-aminothiazole-HBr. The latter was stirred with N-(1-naphthyl)piperazine, Et3N, Na2CO3, and NaI in EtOH at room temp.
for 5 d to give 4-[4-[2-[4-(1-naphthyl)piperazinyl]ethyl]phenyl]-2-aminothiazole.

L22 ANSWER 27 OF 30 REGISTRY COPYRIGHT 1999 ACS
RN 117922-85-7 REGISTRY
CN Piperazine, 1-(6-fluoro-1-naphthalenyl)-4-(phenylmethyl)- (9CI) (CA INDEX
NAME)
OTHER NAMES:
CN 1-Benzyl-4-(6-fluoro-1-naphthyl)piperazine
FS 3D CONCORD
MF C21 H21 F N2
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



4 REFERENCES IN FILE CA (1967 TO DATE)
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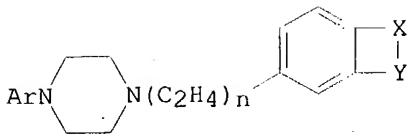
GI



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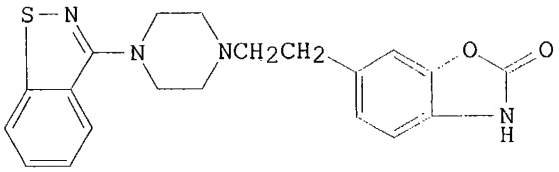

II

AB Title compds. I [Ar = benzothiazolyl, benzothiadiazolyl, benzotriazolyl, benzoxazolyl, benzoxazolonyl, indolyl, phthalazinyl, (un)substituted naphthyl, quinolyl, isoquinolyl, benzoisothiazolyl indanyl, 3-indazolyl; n = 1, 2; X and Y plus attached Ph = benzimidazolonyl, benzotriazolyl, (un)substituted quinolyl, benzothiazolyl, benzoisothiazolyl, indazolyl, indolyl, spiro[cyclopentaneindolinyl]] are prepd. as neuroleptics (no data). Benzoxazolone was acylated by BrCH2CO2H and polyphosphoric acid, and the bromoacetyl deriv. reduced by Et3SiH and CF3CO2H, to give 11% 6-(2-bromoethyl)benzoxazolone. Alkylation of N-(3-benzisothiazolyl)piperazine by the bromide in MIBK contg. Na2CO3 gave benzoxazolone II.

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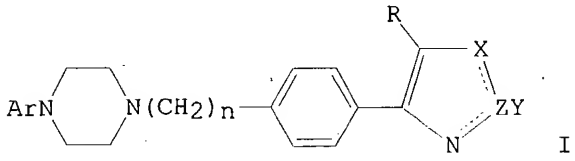

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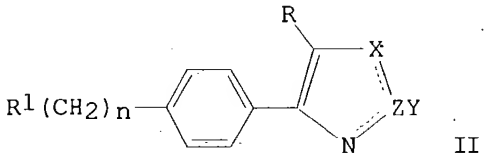

II

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PRIORITY:
WO 87-US423 19870302.
GI For diagram(s), see printed CA Issue.
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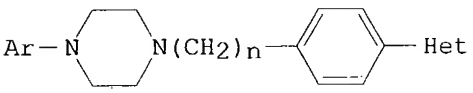
(English). CODEN: EPXXDW. APPLICATION: EP 88-301171 19880212.
PRIORITY:
WO 87-US340 19870217.
GI

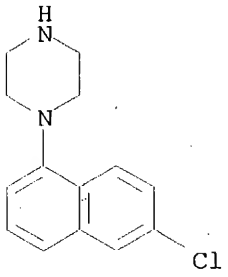


I

AB The title compds. [I; Ar = Ph, 3-F3CC6H4, 3-NCC6H4, naphthyl, (substituted) heterocyclyl; Het = (substituted) imidazolyl, oxazolyl, thiazolyl, thiadiazolyl, triazolyl; n = 2, 3, 4] useful as antipsychotics (no data), were prepd. A soln. of AcCl and AlCl3 in ethylene dichloride was added to PhCH2CH2Cl in ethylene dichloride. The mixt. was stirred at room temp. to give 4-(2-chloroethyl)acetophenone. The latter in AcOH was treated with Br and the product was cyclocondensed with H2NCSNH2 to give 4-[4-(2-chloroethyl)phenyl]-2-aminothiazole-HBr. The latter was stirred with N-(1-naphthyl)piperazine, Et3N, Na2CO3, and NaI in EtOH at room temp.
for 5 d to give 4-[4-[2-[4-(1-naphthyl)piperazinyl]ethyl]phenyl]-2-aminothiazole.

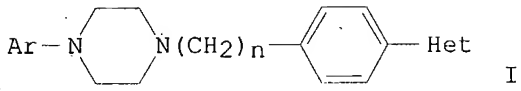
L22 ANSWER 28 OF 30 REGISTRY COPYRIGHT 1999 ACS
RN 117922-80-2 REGISTRY
CN Piperazine, 1-(6-chloro-1-naphthalenyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD

MF C14 H15 Cl N2
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

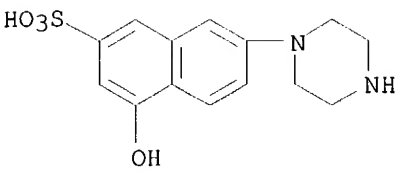
REFERENCE 1: 110:8234 Preparation of 1-aryl-4-(4-heterocyclylphenyl)piperazines as antipsychotics. Lowe, John Adams, III (Pfizer Inc., USA). Eur. Pat. Appl. EP 279598 A2 19880824, 23 pp. DESIGNATED STATES: R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE.
(English). CODEN: EPXXDW. APPLICATION: EP 88-301171 19880212. PRIORITY:
WO 87-US340 19870217.
GI



I

AB The title compds. [I; Ar = Ph, 3-F3CC6H4, 3-NCC6H4, naphthyl, (substituted) heterocyclyl; Het = (substituted) imidazolyl, oxazolyl, thiazolyl, thiadiazolyl, triazolyl; n = 2, 3, 4] useful as antipsychotics (no data), were prepd. A soln. of AcCl and AlCl3 in ethylene dichloride was added to PhCH2CH2Cl in ethylene dichloride. The mixt. was stirred at room temp. to give 4-(2-chloroethyl)acetophenone. The latter in AcOH was treated with Br and the product was cyclocondensed with H2NCSNH2 to give 4-[4-(2-chloroethyl)phenyl]-2-aminothiazole-HBr. The latter was stirred with N-(1-naphthyl)piperazine, Et3N, Na2CO3, and NaI in EtOH at room temp.
for 5 d to give 4-[4-[2-[4-(1-naphthyl)piperazinyl]ethyl]phenyl]-2-aminothiazole.

L22 ANSWER 29 OF 30 REGISTRY COPYRIGHT 1999 ACS
RN 92256-79-6 REGISTRY
CN 2-Naphthalenesulfonic acid, 4-hydroxy-7-(1-piperazinyl)- (7CI, 9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C14 H16 N2 O4 S
LC STN Files: CA, CAOLD, CAPLUS, USPATFULL



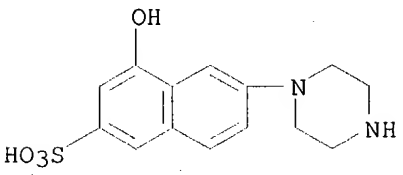
1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 123:202029 Reactive azo dyes, their preparation and their use. Kunde, Klaus (Bayer A.-G., Germany). Eur. Pat. Appl. EP 622424 A1 19941102, 33 pp. DESIGNATED STATES: R: CH, DE, FR, GB, LI. (German). CODEN: EPXXDW. APPLICATION: EP 94-105981 19940418. PRIORITY: DE 93-4314300 19930430.

GI For diagram(s), see printed CA Issue.

AB The dyes (I; A = optionally substituted 1,4-phenylene or -naphthylene; R1, R2 = H, optionally substituted alkyl or phenyl; Z = connecting group; R1ZR2 = optionally substitued 1,4-piperazinediyl; X = fiber-reactive group) are obtained from the appropriate azo compds. (prepd. by conventional coupling) and chlorohalotriazine derivs. I have very good wetfastness on cellulosics. Thus, H acid O-benzenesulfonate.fwdarw.2-methoxy-5-methylaniline.fwdarw.7-(2-aminoethylamino)-4-hydroxy-2-naphthalenesulfonic acid was prepd. and condensed with cyanuric fluoride and 2-amino-1,4-benzenedisulfonic acid to give a product which dyed cotton and rayon blue.

L22 ANSWER 30 OF 30 REGISTRY COPYRIGHT 1999 ACS
RN 92256-78-5 REGISTRY
CN 2-Naphthalenesulfonic acid, 4-hydroxy-6-(1-piperazinyl)- (7CI) (CA INDEX NAME)
FS 3D CONCORD
MF C14 H16 N2 O4 S
LC STN Files: CAOLD



2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	650.18	650.33

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-14.79	-14.79

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FILE LAST UPDATED: 01 May 1997 (19970501/UP)

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L23 2 L22

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L23 ANSWER 1 OF 2 COPYRIGHT 1999 ACS
AN CA61:8445h CAOLD
DT Patent
IT **92256-78-5** 101612-89-9

L23 ANSWER 2 OF 2 COPYRIGHT 1999 ACS
AN CA60:12029d CAOLD
DT Patent
IT **92256-78-5** **92256-79-6**

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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	1.26	651.59

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-14.79

FILE 'REGISTRY' ENTERED AT 14:26:47 ON 05 MAR 1999
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

STRUCTURE FILE UPDATES: 26 FEB 99 HIGHEST RN 220057-69-2
DICTIONARY FILE UPDATES: 4 MAR 99 HIGHEST RN 220094-18-8

TSCA INFORMATION NOW CURRENT THROUGH JUNE 29, 1998

Please note that search-term pricing does apply when conducting SmartSELECT searches.

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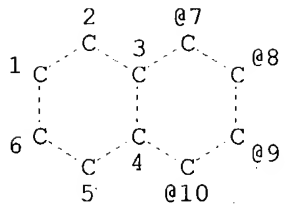
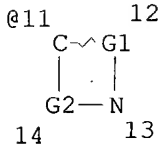
L5 STR





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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
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NUMBER OF NODES IS 14

STEREO ATTRIBUTES: NONE
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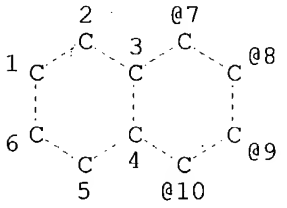

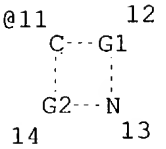

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REP G2=(0-4) C
VPA 11-7/8/9/10 U
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 14

STEREO ATTRIBUTES: NONE
L8 4 SEA FILE=REGISTRY SSS SAM L5 NOT L7

8.8% PROCESSED 1000 ITERATIONS 4 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 221276 TO 234004
PROJECTED ANSWERS: 506 TO 1314

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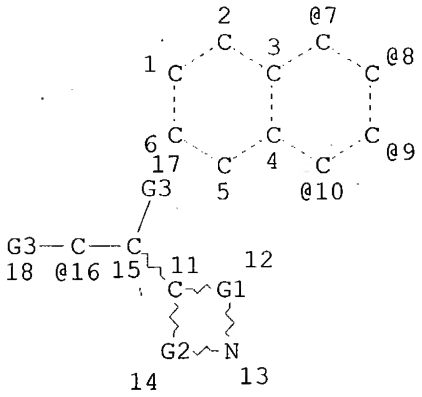
L11 STR



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VAR G3=H/ME
VPA 16-7/8/9/10 U
NODE ATTRIBUTES:
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NUMBER OF NODES IS 18

STEREO ATTRIBUTES: NONE
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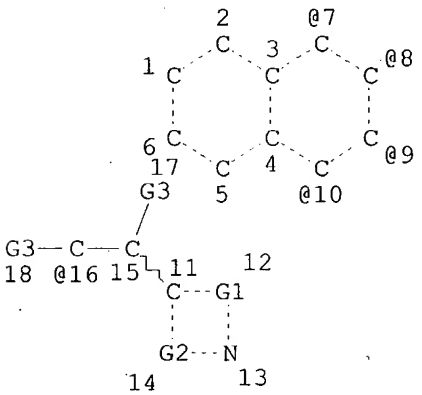

REP G1=(1-4) C
REP G2=(0-4) C
VAR G3=H/ME

VPA 16-7/8/9/10 U
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
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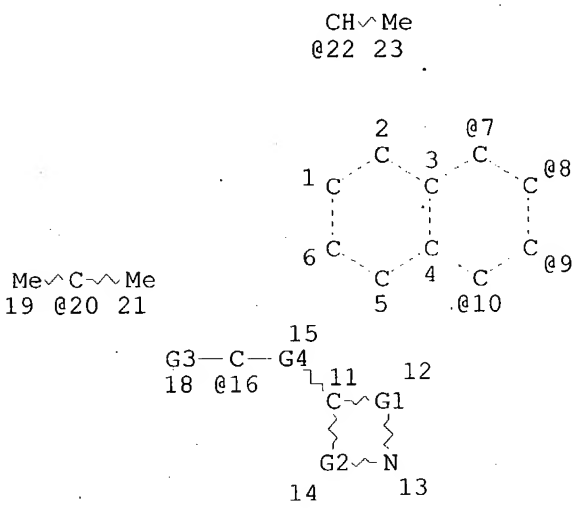
NUMBER OF NODES IS 18

STEREO ATTRIBUTES: NONE
L15 72 SEA FILE=REGISTRY SSS FUL L11 NOT L13
L16 STR



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REP G2=(0-4) C
VAR G3=H/ME
VAR G4=CH2/20/22
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GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 22

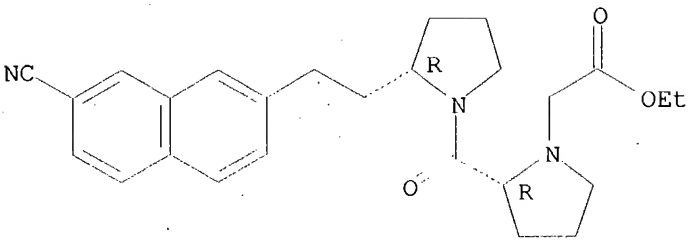
STEREO ATTRIBUTES: NONE
L17 36 SEA FILE=REGISTRY SUB=L15 SSS FUL L16

100.0% PROCESSED 72 ITERATIONS 36 ANSWERS
SEARCH TIME: 00.00.01

L17 ANSWER 1 OF 36 REGISTRY COPYRIGHT 1999 ACS
RN 200185-71-3 REGISTRY
CN 1-Pyrrolidineacetic acid, 2-[[2-[2-(7-cyano-2-naphthalenyl)ethyl]-1-pyrrolidinyl]carbonyl]-, ethyl ester, [R-(R*,R*)]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C26 H31 N3 O3
SR CA

LC STN Files: CA, CAPLUS

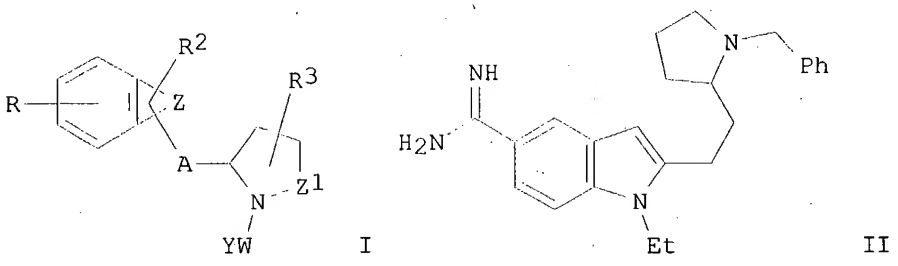
Absolute stereochemistry.



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 128:61425 Preparation of indolecarboxamidines and analogs as thrombin inhibitors. Koo, Bon Am; Min, Jae Ki; Hong, Woo Sang; Ryu, Eun Jung; Nam, Woong Hyun; Kim, Jong Min (C & C Research Laboratories, S. Korea; Koo, Bon Am; Min, Jae Ki; Hong, Woo Sang; Ryu, Eun Jung; Nam, Woong Hyun; Kim, Jong Min). PCT Int. Appl. WO 9745424 A1 19971204, 257 pp. DESIGNATED STATES: W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 97-KR100 19970531. PRIORITY: KR 96-19282 19960531.

GI



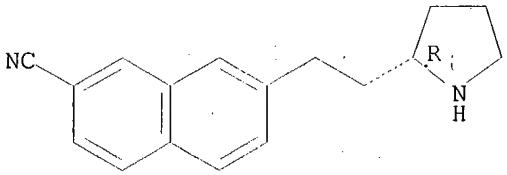
I II

AB Title compds. [I; A = (un)substituted alkylene; R = C(:NR1)NH2 or C(:NH)NHR1; R1 = H, OH, alkyl, alkanoyl, etc.; R2 = H, halo, alkyl, alkoxy, etc.; R3 = H, halo, alkyl, alkoxycarbonyl, etc.; W = (un)substituted Z2(CH2)0-3; Y = H, (un)substituted cycloalkyl, heterocyclyl, etc.; Z = Z3CH:CH, NHCH:N, CH:CHCH:CH, etc.; Z1 = bond, CH2, CH2CH2; Z2 = bond, CO, SO2; Z3 = NH, O, S] were prepd. Thus, 4-MeC6H4CN was nitrated and the product condensed with (CO2Et)2 to give, after cyclization in the presence of Zn, Et 6-cyanoindole-2-carboxylate. The latter was N-ethylated and the product treated, after redn., successively with PBr3 and Ph3P to give the Wittig reagent which was condensed with (S)-N-tert-butoxycarbonyl-2-formylpyrrolidine (prepn. given) to give, in

addnl. steps, title compd. (S)-II. Data for biol. activity of I were given.

L17 ANSWER 2 OF 36 REGISTRY COPYRIGHT 1999 ACS
RN 200185-70-2 REGISTRY
CN 2-Naphthalenecarbonitrile, 7-[2-(2-pyrrolidinyl)ethyl]-, (R)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C17 H18 N2
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 128:61425 Preparation of indolecarboxamidines and analogs as thrombin inhibitors. Koo, Bon Am; Min, Jae Ki; Hong, Woo Sang; Ryu, Eun Jung; Nam, Woong Hyun; Kim, Jong Min (C & C Research Laboratories, S. Korea; Koo, Bon Am; Min, Jae Ki; Hong, Woo Sang; Ryu, Eun Jung; Nam, Woong Hyun; Kim, Jong Min). PCT Int. Appl. WO 9745424 A1 19971204, 257 pp. DESIGNATED STATES: W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 97-KR100 19970531. PRIORITY: KR 96-19282 19960531.

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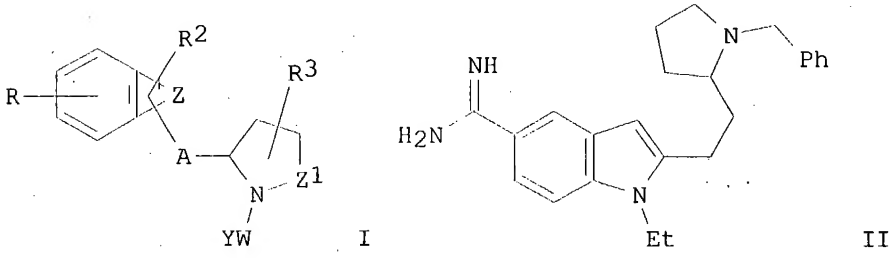
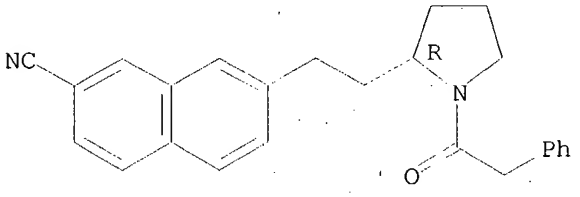


AB Title compds. [I; A = (un)substituted alkylene; R = C(:NR1)NH2 or C(:NH)NHR1; R1 = H, OH, alkyl, alkanoyl, etc.; R2 = H, halo, alkyl, alkoxy, etc.; R3 = H, halo, alkyl, alkoxycarbonyl, etc.; W = (un)substituted Z2(CH2)0-3; Y = H, (un)substituted cycloalkyl, heterocyclyl, etc.; Z = Z3CH:CH, NHCH:N, CH:CHCH:CH, etc.; Z1 = bond, CH2,

CH2CH2; Z2 = bond, CO, SO2; Z3 = NH, O, S] were prepd. Thus, 4-MeC6H4CN was nitrated and the product condensed with (CO2Et)2 to give, after cyclization in the presence of Zn, Et 6-cyanoindole-2-carboxylate. The latter was N-ethylated and the product treated, after redn., successively with PBr3 and Ph3P to give the Wittig reagent which was condensed with (S)-N-tert-butoxycarbonyl-2-formylpyrrolidine (prepn. given) to give, in 4 addnl. steps, title compd. (S)-II. Data for biol. activity of I were given.

L17 ANSWER 3 OF 36 REGISTRY COPYRIGHT 1999 ACS
RN 200185-69-9 REGISTRY
CN Pyrrolidine, 2-[2-(7-cyano-2-naphthalenyl)ethyl]-1-(phenylacetyl)-, (R)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C25 H24 N2 O
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 128:61425 Preparation of indolecarboxamidines and analogs as thrombin inhibitors. Koo, Bon Am; Min, Jae Ki; Hong, Woo Sang; Ryu, Eun Jung; Nam, Woong Hyun; Kim, Jong Min (C & C Research Laboratories, S. Korea; Koo, Bon Am; Min, Jae Ki; Hong, Woo Sang; Ryu, Eun Jung; Nam, Woong Hyun; Kim, Jong Min). PCT Int. Appl. WO 9745424 A1 19971204, 257 pp. DESIGNATED STATES: W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 97-KR100 19970531. PRIORITY: KR 96-19282 19960531.

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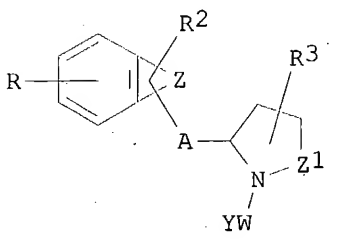

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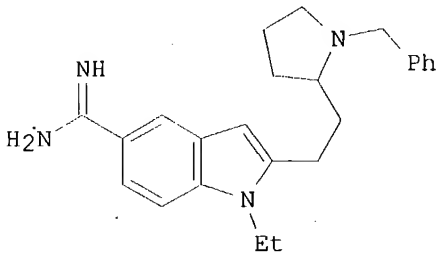
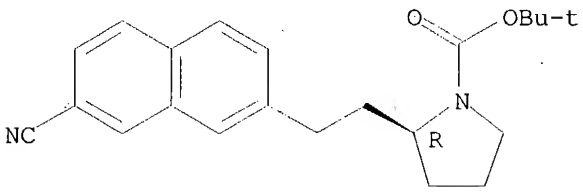


II

AB Title compds. [I; A = (un)substituted alkylene; R = C(:NR1)NH2 or C(:NH)NHR1; R1 = H, OH, alkyl, alkanoyl, etc.; R2 = H, halo, alkyl, alkoxy, etc.; R3 = H, halo, alkyl, alkoxycarbonyl, etc.; W = (un)substituted Z2(CH2)0-3; Y = H, (un)substituted cycloalkyl, heterocyclyl, etc.; Z = Z3CH:CH, NHCH:N, CH:CHCH:CH, etc.; Z1 = bond, CH2, CH2CH2; Z2 = bond, CO, SO2; Z3 = NH, O, S] were prepd. Thus, 4-MeC6H4CN was nitrated and the product condensed with (CO2Et)2 to give, after cyclization in the presence of Zn, Et 6-cyanoindole-2-carboxylate. The latter was N-ethylated and the product treated, after redn., successively with PBr3 and Ph3P to give the Wittig reagent which was condensed with (S)-N-tert-butoxycarbonyl-2-formylpyrrolidine (prepn. given) to give, in 4 addnl. steps, title compd. (S)-II. Data for biol. activity of I were given.

L17 ANSWER 4 OF 36 REGISTRY COPYRIGHT 1999 ACS
RN 200185-68-8 REGISTRY
CN 1-Pyrrolidinecarboxylic acid, 2-[2-(7-cyano-2-naphthalenyl)ethyl]-, 1,1-dimethylethyl ester, (R)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C22 H26 N2 O2
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 128:61425 Preparation of indolecarboxamidines and analogs as thrombin inhibitors. Koo, Bon Am; Min, Jae Ki; Hong, Woo Sang; Ryu, Eun Jung; Nam, Woong Hyun; Kim, Jong Min (C & C Research Laboratories, S. Korea; Koo, Bon Am; Min, Jae Ki; Hong, Woo Sang; Ryu, Eun Jung; Nam, Woong Hyun; Kim, Jong Min). PCT Int. Appl. WO 9745424 A1 19971204, 257 pp. DESIGNATED STATES: W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 97-KR100 19970531. PRIORITY: KR 96-19282 19960531.

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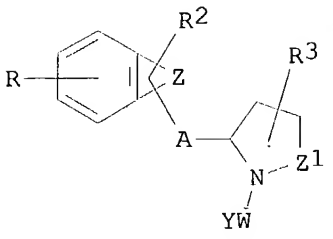

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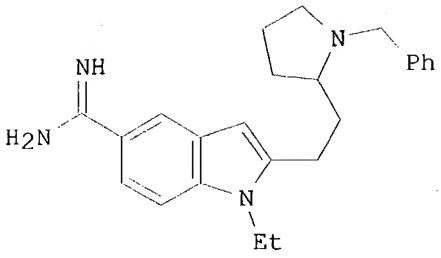
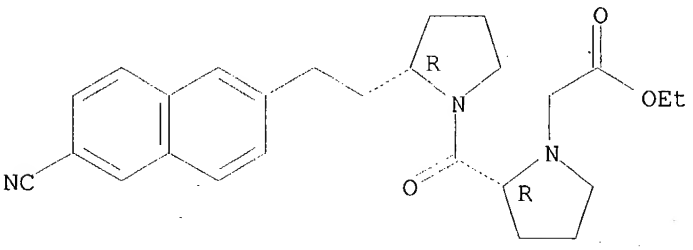


II

AB Title compds. [I; A = (un)substituted alkylene; R = C(:NR1)NH2 or C(:NH)NHR1; R1 = H, OH, alkyl, alkanoyl, etc.; R2 = H, halo, alkyl, alkoxy, etc.; R3 = H, halo, alkyl, alkoxycarbonyl, etc.; W = (un)substituted Z2(CH2)0-3; Y = H, (un)substituted cycloalkyl, heterocyclyl, etc.; Z = Z3CH:CH, NHCH:N, CH:CHCH:CH, etc.; Z1 = bond, CH2, CH2CH2; Z2 = bond, CO, SO2; Z3 = NH, O, S] were prepd. Thus, 4-MeC6H4CN was nitrated and the product condensed with (CO2Et)2 to give, after cyclization in the presence of Zn, Et 6-cyanoindole-2-carboxylate. The latter was N-ethylated and the product treated, after redn., successively with PBr3 and Ph3P to give the Wittig reagent which was condensed with (S)-N-tert-butoxycarbonyl-2-formylpyrrolidine (prepn. given) to give, in 4 addnl. steps, title compd. (S)-II. Data for biol. activity of I were given.

L17 ANSWER 5 OF 36 REGISTRY COPYRIGHT 1999 ACS
RN 200185-66-6 REGISTRY
CN 1-Pyrrolidineacetic acid, 2-[[2-[2-(6-cyano-2-naphthalenyl)ethyl]-1-pyrrolidinyl]carbonyl]-, ethyl ester, [R-(R*,R*)]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C26 H31 N3 O3
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 128:61425 Preparation of indolecarboxamidines and analogs as thrombin inhibitors. Koo, Bon Am; Min, Jae Ki; Hong, Woo Sang; Ryu, Eun Jung; Nam, Woong Hyun; Kim, Jong Min (C & C Research Laboratories, S. Korea; Koo, Bon Am; Min, Jae Ki; Hong, Woo Sang; Ryu, Eun Jung; Nam, Woong Hyun; Kim, Jong Min). PCT Int. Appl. WO 9745424 A1 19971204, 257 pp. DESIGNATED STATES: W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN,

CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 97-KR100 19970531. PRIORITY: KR 96-19282 19960531.

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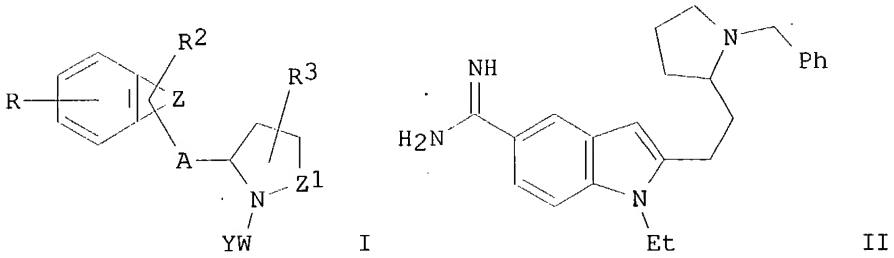
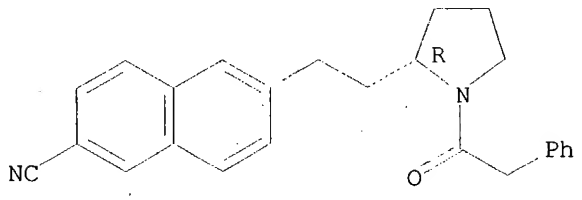


I II

AB Title compds. [I; A = (un)substituted alkylene; R = C(:NR1)NH2 or C(:NH)NHR1; R1 = H, OH, alkyl, alkanoyl, etc.; R2 = H, halo, alkyl, alkoxy, etc.; R3 = H, halo, alkyl, alkoxycarbonyl, etc.; W = (un)substituted Z2(CH2)0-3; Y = H, (un)substituted cycloalkyl, heterocyclyl, etc.; Z = Z3CH:CH, NHCH:N, CH:CHCH:CH, etc.; Z1 = bond, CH2, CH2CH2; Z2 = bond, CO, SO2; Z3 = NH, O, S] were prepd. Thus, 4-MeC6H4CN was nitrated and the product condensed with (CO2Et)2 to give, after cyclization in the presence of Zn, Et 6-cyanoindole-2-carboxylate. The latter was N-ethylated and the product treated, after redn., successively with PBr3 and Ph3P to give the Wittig reagent which was condensed with (S)-N-tert-butoxycarbonyl-2-formylpyrrolidine (prepn. given) to give, in 4 addnl. steps, title compd. (S)-II. Data for biol. activity of I were given.

L17 ANSWER 6 OF 36 REGISTRY COPYRIGHT 1999 ACS
RN 200185-65-5 REGISTRY
CN Pyrrolidine, 2-[2-(6-cyano-2-naphthalenyl)ethyl]-1-(phenylacetyl)-, (R)-(9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C25 H24 N2 O
SR CA
LC STN Files: CA, CAPLUS

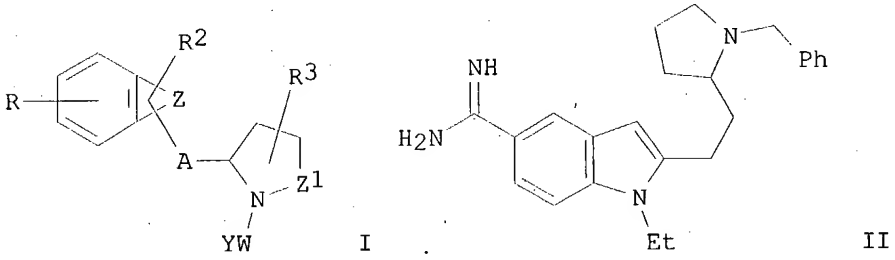
Absolute stereochemistry.



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 128:61425 Preparation of indolecarboxamidines and analogs as thrombin inhibitors. Koo, Bon Am; Min, Jae Ki; Hong, Woo Sang; Ryu, Eun Jung; Nam, Woong Hyun; Kim, Jong Min (C & C Research Laboratories, S. Korea; Koo, Bon Am; Min, Jae Ki; Hong, Woo Sang; Ryu, Eun Jung; Nam, Woong Hyun; Kim, Jong Min). PCT Int. Appl. WO 9745424 A1 19971204, 257 pp. DESIGNATED STATES: W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 97-KR100 19970531. PRIORITY: KR 96-19282 19960531.

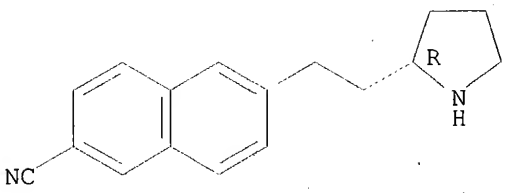
GI



AB Title compds. [I; A = (un)substituted alkylene; R = C(:NR1)NH2 or C(:NH)NHR1; R1 = H, OH, alkyl, alkanoyl, etc.; R2 = H, halo, alkyl, alkoxy, etc.; R3 = H, halo, alkyl, alkoxycarbonyl, etc.; W = (un)substituted Z2(CH2)0-3; Y = H, (un)substituted cycloalkyl, heterocyclyl, etc.; Z = Z3CH:CH, NHCH:N, CH:CHCH:CH, etc.; Z1 = bond, CH2, CH2CH2; Z2 = bond, CO, SO2; Z3 = NH, O, S] were prepd. Thus, 4-MeC6H4CN was nitrated and the product condensed with (CO2Et)2 to give, after cyclization in the presence of Zn, Et 6-cyanoindole-2-carboxylate. The latter was N-ethylated and the product treated, after redn., successively with PBr3 and Ph3P to give the Wittig reagent which was condensed with (S)-N-tert-butoxycarbonyl-2-formylpyrrolidine (prepn. given) to give, in 4 addnl. steps, title compd. (S)-II. Data for biol. activity of I were given.

L17 ANSWER 7 OF 36 REGISTRY COPYRIGHT 1999 ACS
RN 200185-64-4 REGISTRY
CN 2-Naphthalenecarbonitrile, 6-[2-(2-pyrrolidinyl)ethyl]-, (R)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C17 H18 N2
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 128:61425 Preparation of indolecarboxamidines and analogs as thrombin inhibitors. Koo, Bon Am; Min, Jae Ki; Hong, Woo Sang; Ryu, Eun Jung; Nam, Woong Hyun; Kim, Jong Min (C & C Research Laboratories, S. Korea; Koo, Bon Am; Min, Jae Ki; Hong, Woo Sang; Ryu, Eun Jung; Nam, Woong Hyun; Kim, Jong Min). PCT Int. Appl. WO 9745424 A1 19971204, 257 pp. DESIGNATED STATES: W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 97-KR100 19970531. PRIORITY: KR 96-19282 19960531.

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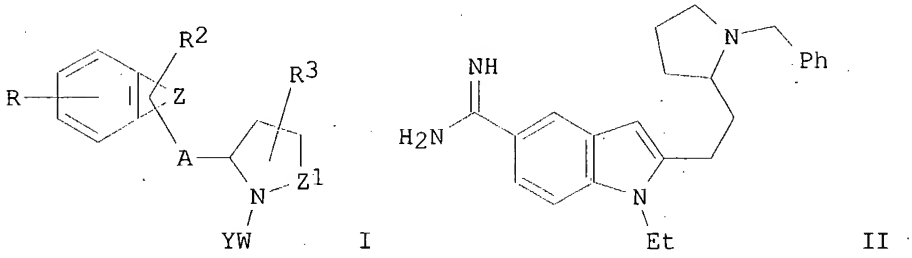
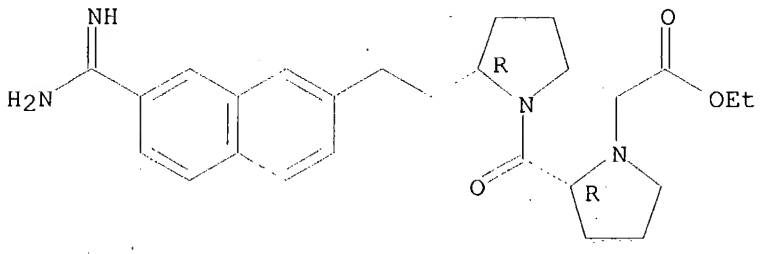


AB Title compds. [I; A = (un)substituted alkylene; R = C(:NR1)NH2 or C(:NH)NHR1; R1 = H, OH, alkyl, alkanoyl, etc.; R2 = H, halo, alkyl, alkoxy, etc.; R3 = H, halo, alkyl, alkoxycarbonyl, etc.; W = (un)substituted Z2(CH2)0-3; Y = H, (un)substituted cycloalkyl, heterocyclyl, etc.; Z = Z3CH:CH, NHCH:N, CH:CHCH:CH, etc.; Z1 = bond, CH2, CH2CH2; Z2 = bond, CO, SO2; Z3 = NH, O, S] were prepd. Thus, 4-MeC6H4CN was nitrated and the product condensed with (CO2Et)2 to give, after cyclization in the presence of Zn, Et 6-cyanoindole-2-carboxylate. The latter was N-ethylated and the product treated, after redn., successively with PBr3 and Ph3P to give the Wittig reagent which was condensed with (S)-N-tert-butoxycarbonyl-2-formylpyrrolidine (prepn. given) to give, in 4 addnl. steps, title compd. (S)-II. Data for biol. activity of I were given.

L17 ANSWER 8 OF 36 REGISTRY COPYRIGHT 1999 ACS
RN 200183-83-1 REGISTRY

CN 1-Pyrrolidineacetic acid, 2-[[2-[2-[7-(aminoiminomethyl)-2-naphthalenyl]ethyl]-1-pyrrolidinyl]carbonyl]-, ethyl ester, [R-(R*,R*)]-(9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C26 H34 N4 O3
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 128:61425 Preparation of indolecarboxamidines and analogs as thrombin inhibitors. Koo, Bon Am; Min, Jae Ki; Hong, Woo Sang; Ryu, Eun Jung; Nam, Woong Hyun; Kim, Jong Min (C & C Research Laboratories, S. Korea; Koo, Bon Am; Min, Jae Ki; Hong, Woo Sang; Ryu, Eun Jung; Nam, Woong Hyun; Kim, Jong Min). PCT Int. Appl. WO 9745424 A1 19971204, 257 pp. DESIGNATED STATES: W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 97-KR100 19970531. PRIORITY: KR 96-19282 19960531.

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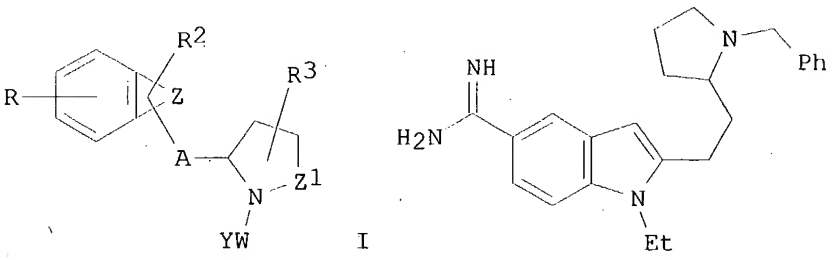
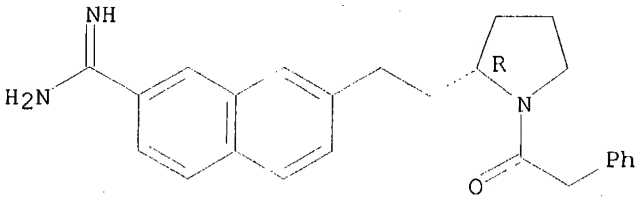


AB Title compds. [I; A = (un)substituted alkylene; R = C(:NR1)NH2 or C(:NH)NHR1; R1 = H, OH, alkyl, alkanoyl, etc.; R2 = H, halo, alkyl, alkoxy, etc.; R3 = H, halo, alkyl, alkoxycarbonyl, etc.; W = (un)substituted Z2(CH2)0-3; Y = H, (un)substituted cycloalkyl, heterocyclyl, etc.; Z = Z3CH:CH, NHCH:N, CH:CHCH:CH, etc.; Z1 = bond, CH2, CH2CH2; Z2 = bond, CO, SO2; Z3 = NH, O, S] were prepd. Thus, 4-MeC6H4CN

was nitrated and the product condensed with (CO2Et)2 to give, after cyclization in the presence of Zn, Et 6-cyanoindole-2-carboxylate. The latter was N-ethylated and the product treated, after redn., successively with PBr3 and Ph3P to give the Wittig reagent which was condensed with (S)-N-tert-butoxycarbonyl-2-formylpyrrolidine (prepn. given) to give, in 4 addnl. steps, title compd. (S)-II. Data for biol. activity of I were given.

L17 ANSWER 9 OF 36 REGISTRY COPYRIGHT 1999 ACS
RN 200183-82-0 REGISTRY
CN Pyrrolidine, 2-[2-[7-(aminoiminomethyl)-2-naphthalenyl]ethyl]-1-(phenylacetyl)-, (R)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C25 H27 N3 O
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 128:61425 Preparation of indolecarboxamidines and analogs as thrombin inhibitors. Koo, Bon Am; Min, Jae Ki; Hong, Woo Sang; Ryu, Eun Jung; Nam, Woong Hyun; Kim, Jong Min (C & C Research Laboratories, S. Korea; Koo, Bon Am; Min, Jae Ki; Hong, Woo Sang; Ryu, Eun Jung; Nam, Woong Hyun; Kim, Jong Min). PCT Int. Appl. WO 9745424 A1 19971204, 257 pp. DESIGNATED STATES: W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 97-KR100 19970531. PRIORITY: KR 96-19282 19960531.

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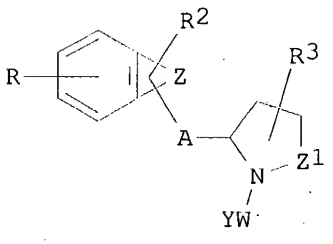

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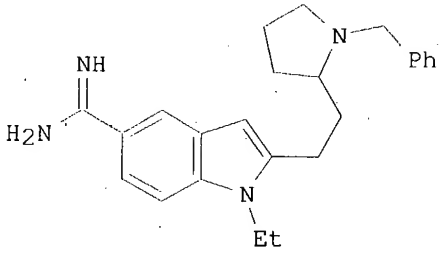
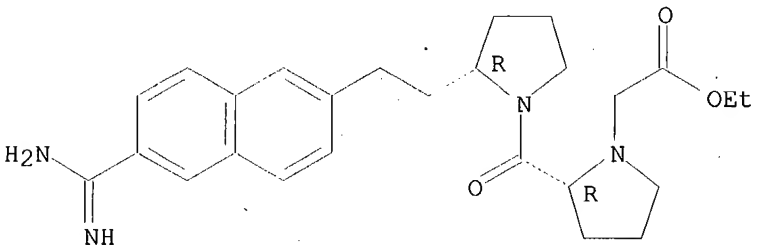


II

AB Title compds. [I; A = (un)substituted alkylene; R = C(:NR1)NH2 or C(:NH)NHR1; R1 = H, OH, alkyl, alkanoyl, etc.; R2 = H, halo, alkyl, alkoxy, etc.; R3 = H, halo, alkyl, alkoxycarbonyl, etc.; W = (un)substituted Z2(CH2)0-3; Y = H, (un)substituted cycloalkyl, heterocyclyl, etc.; Z = Z3CH:CH, NHCH:N, CH:CHCH:CH, etc.; Z1 = bond, CH2, CH2CH2; Z2 = bond, CO, SO2; Z3 = NH, O, S] were prepd. Thus, 4-MeC6H4CN was nitrated and the product condensed with (CO2Et)2 to give, after cyclization in the presence of Zn, Et 6-cyanoindole-2-carboxylate. The latter was N-ethylated and the product treated, after redn., successively with PBr3 and Ph3P to give the Wittig reagent which was condensed with (S)-N-tert-butoxycarbonyl-2-formylpyrrolidine (prepn. given) to give, in 4 addnl. steps, title compd. (S)-II. Data for biol. activity of I were given.

L17 ANSWER 10 OF 36 REGISTRY COPYRIGHT 1999 ACS
RN 200183-81-9 REGISTRY
CN 1-Pyrrolidineacetic acid, 2-[[2-[2-[6-(aminoiminomethyl)-2-naphthalenyl]ethyl]-1-pyrrolidinyl]carbonyl]-, ethyl ester, [R-(R*,R*)]-(9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C26 H34 N4 O3
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 128:61425 Preparation of indolecarboxamidines and analogs as thrombin inhibitors. Koo, Bon Am; Min, Jae Ki; Hong, Woo Sang; Ryu, Eun Jung; Nam, Woong Hyun; Kim, Jong Min (C & C Research Laboratories, S. Korea; Koo, Bon Am; Min, Jae Ki; Hong, Woo Sang; Ryu, Eun Jung; Nam, Woong Hyun; Kim, Jong Min). PCT Int. Appl. WO 9745424 A1 19971204, 257 pp. DESIGNATED STATES: W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 97-KR100 19970531. PRIORITY: KR 96-19282 19960531.

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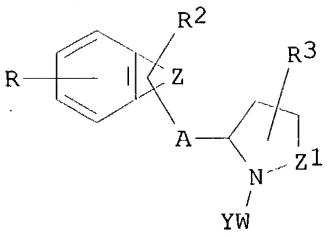

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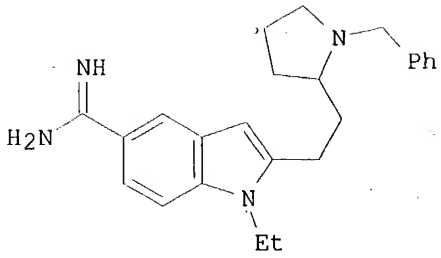
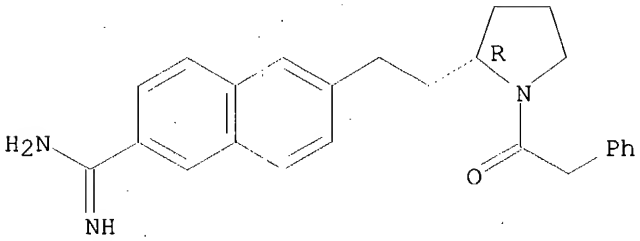


II

AB Title compds. [I; A = (un)substituted alkylene; R = C(:NR1)NH2 or C(:NH)NHR1; R1 = H, OH, alkyl, alkanoyl, etc.; R2 = H, halo, alkyl, alkoxy, etc.; R3 = H, halo, alkyl, alkoxycarbonyl, etc.; W = (un)substituted Z2(CH2)0-3; Y = H, (un)substituted cycloalkyl, heterocyclyl, etc.; Z = Z3CH:CH, NHCH:N, CH:CHCH:CH, etc.; Z1 = bond, CH2, CH2CH2; Z2 = bond, CO, SO2; Z3 = NH, O, S] were prepd. Thus, 4-MeC6H4CN was nitrated and the product condensed with (CO2Et)2 to give, after cyclization in the presence of Zn, Et 6-cyanoindole-2-carboxylate. The latter was N-ethylated and the product treated, after redn., successively with PBr3 and Ph3P to give the Wittig reagent which was condensed with (S)-N-tert-butoxycarbonyl-2-formylpyrrolidine (prepn. given) to give, in 4 addnl. steps, title compd. (S)-II. Data for biol. activity of I were given.

L17 ANSWER 11 OF 36 REGISTRY COPYRIGHT 1999 ACS
RN 200183-80-8 REGISTRY
CN Pyrrolidine, 2-[2-[6-(aminoiminomethyl)-2-naphthalenyl]ethyl]-1-(phenylacetyl)-, (R)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C25 H27 N3 O
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

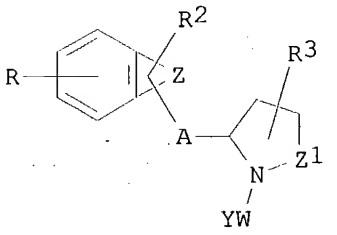


1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 128:61425 Preparation of indolecarboxamidines and analogs as thrombin inhibitors. Koo, Bon Am; Min, Jae Ki; Hong, Woo Sang; Ryu, Eun Jung; Nam, Woong Hyun; Kim, Jong Min (C & C Research Laboratories, S. Korea; Koo, Bon Am; Min, Jae Ki; Hong, Woo Sang; Ryu, Eun Jung; Nam, Woong Hyun; Kim, Jong Min). PCT Int. Appl. WO 9745424 A1 19971204, 257 pp. DESIGNATED STATES: W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN,

CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 97-KR100 19970531. PRIORITY: KR 96-19282 19960531.

GI



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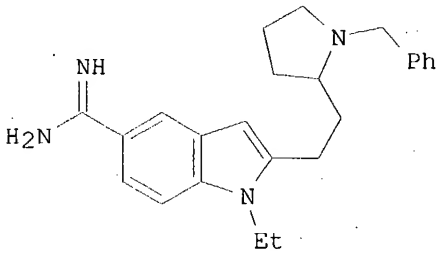
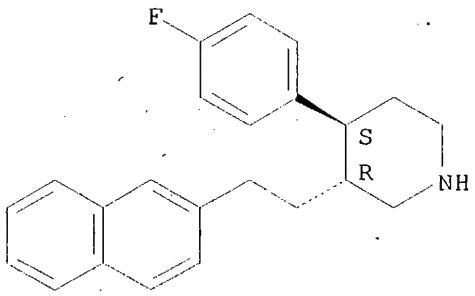


II

AB Title compds. [I; A = (un)substituted alkylene; R = C(:NR1)NH2 or C(:NH)NHR1; R1 = H, OH, alkyl, alkanoyl, etc.; R2 = H, halo, alkyl, alkoxy, etc.; R3 = H, halo, alkyl, alkoxycarbonyl, etc.; W = (un)substituted Z2(CH2)0-3; Y = H, (un)substituted cycloalkyl, heterocyclyl, etc.; Z = Z3CH:CH, NHCH:N, CH:CHCH:CH, etc.; Z1 = bond, CH2, CH2CH2; Z2 = bond, CO, SO2; Z3 = NH, O, S] were prepd. Thus, 4-MeC6H4CN was nitrated and the product condensed with (CO2Et)2 to give, after cyclization in the presence of Zn, Et 6-cyanoindole-2-carboxylate. The latter was N-ethylated and the product treated, after redn., successively with PBr3 and Ph3P to give the Wittig reagent which was condensed with (S)-N-tert-butoxycarbonyl-2-formylpyrrolidine (prepn. given) to give, in 4 addnl. steps, title compd. (S)-II. Data for biol. activity of I were given.

L17 ANSWER 12 OF 36 REGISTRY COPYRIGHT 1999 ACS
RN 188872-03-9 REGISTRY
CN Piperidine, 4-(4-fluorophenyl)-3-[2-(2-naphthalenyl)ethyl]-, trans- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C23 H24 F N
SR CA
LC STN Files: CA, CAPLUS

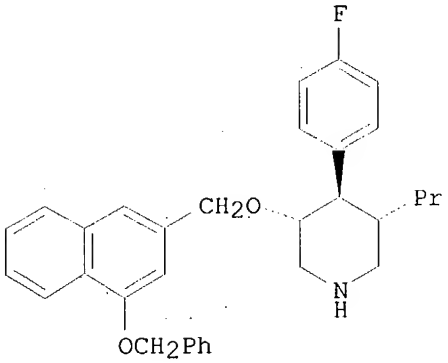
Relative stereochemistry.



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 126:277402 New 4-aryl-3-aralkoxypiperidines and -azabicyclooctanes for treating heart and kidney insufficiency. Binggeli, Alfred; Breu, Volker; Bur, Daniel; Fischli, Walter; Gueller, Rolf; Hirth, Georges; Maerki, Hans-Peter; Mueller, Marcel; Oefner, Christian; Stadler, Heinz; Vieira, Eric; Wilhelm, Maurice; Wostl, Wolfgang (F. Hoffmann-La Roche Ag, Switz.). PCT Int. Appl. WO 9709311 A1 19970313, 492 pp. DESIGNATED STATES: W: AU, BR, CA, CN, CZ, HU, IL, JP, KR, MX, NO, NZ, PL, RU, SG, TR; RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE. (German). CODEN: PIXXD2. APPLICATION: WO 96-EP3803 19960829. PRIORITY: CH 95-2548 19950907; CH 96-1876 19960726.

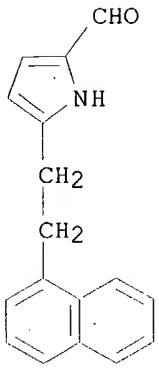
GI



I

AB New piperidine and azabicyclooctane derivs. (> 1000 compds.) are renin inhibitors for treatment of high blood pressure, heart and kidney insufficiency. Thus, the piperidine deriv. I was prepd. from 1-benzyl-3-propyl-4-piperidinone by reaction with 4-FC6H4Br, followed by 1-benzyloxy-3-chloromethylnaphthalene and deblocking. I had a renin-inhibiting IC50 of 0.317 .mu.M.

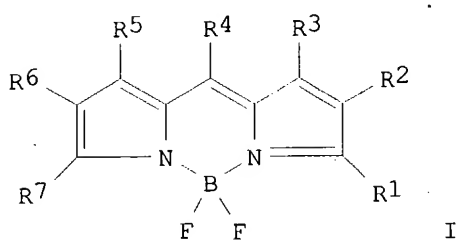
L17 ANSWER 13 OF 36 REGISTRY COPYRIGHT 1999 ACS
RN 158697-99-5 REGISTRY
CN 1H-Pyrrole-2-carboxaldehyde, 5-[2-(1-naphthalenyl)ethyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C17 H15 N O
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 121:267325 Fluorescent fatty acids derived from dipyrrometheneboron difluoride dyes. Kang, Hee C.; Haugland, Richard P. (Molecular Probes, Inc., USA). U.S. US 5338854 A 19940816, 13 pp. (English). CODEN: USXXAM. APPLICATION: US 91-654881 19910213.

GI



I

AB The title derivs. are described by the general formula I (.gtoreq.1 of R1, R2, R3, R4,R5, R6, and R7 is a carboxylic acid-terminated residue which is a C5-22 linear or branched hydrocarbon chain that is fully satd. or unsatd.; .gtoreq.1 of R1, R2, R3, R5, R6, and R7 is an aryl residue selected from unsubstituted Ph, unsubstituted naphthyl, lower alkyl- or alkoxy-substituted Ph, or lower alkyl- or alkoxy-substituted naphthyl, or a heteroaryl residue selected from pyrrole, thiophene, furan, oxazole, isoxazole, oxadiazole, imidazole, benzoxazole, benzothiazole, benzimidazole, benzofuran, or indole; and the remaining substituents R1, R2, R3, R4, R5, R6, and R7, which may be the same or different, are alkyl or arylalkyl residues contg. 1 to 16 aliph. carbon atoms, or aryl or heteroaryl residues, where the aryl residue is unsubstituted Ph, unsubstituted naphthyl, lower alkyl- or alkoxy-substituted Ph, or lower alkyl- or alkoxy-substituted naphthyl, and where the heteroaryl residue is pyrrole, thiophene, furan, oxazole, isoxazole, oxadiazole, imidazole, benzoxazole, benzothizole, benzimidazole, benzofuran, or indole, or H). Sym. substituteed fluorophores are conveniently synthesized from a single pyrrole precursor in a "one-pot" reaction. Alternatively, these fatty acid deris. may be synthesized from two different pyrrole precursors. The

combination of fatty acids with these elec. neutral, photostable, strongly colored, and mostly highly fluorescent dipyrromethene boron difluoride dyes having relatively narrow absorption and emission spectra results in an improved fluorescent probe particularly useful for studying natural and synthetic lipid membranes and related areas.

L17 ANSWER 14 OF 36 REGISTRY COPYRIGHT 1999 ACS
RN 158697-98-4 REGISTRY
CN 1H-Pyrrole, 2-[2-(1-naphthalenyl)ethyl]- (9CI) (CA INDEX NAME)
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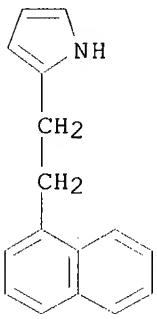
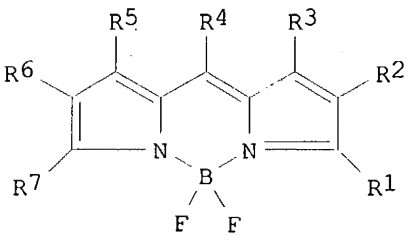
LC STN Files: CA, CAPLUS, USPATFULL



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 121:267325 Fluorescent fatty acids derived from dipyrromethene boron difluoride dyes. Kang, Hee C.; Haugland, Richard P. (Molecular Probes, Inc., USA). U.S. US 5338854 A 19940816, 13 pp. (English). CODEN: USXXAM. APPLICATION: US 91-654881 19910213.

GI



I

AB The title derivs. are described by the general formula I (.gtoreq.1 of R1, R2, R3, R4,R5, R6, and R7 is a carboxylic acid-terminated residue which is a C5-22 linear or branched hydrocarbon chain that is fully satd. or unsatd.; .gtoreq.1 of R1, R2, R3, R5, R6, and R7 is an aryl residue selected from unsubstituted Ph, unsubstituted naphthyl, lower alkyl- or alkoxy-substituted Ph, or lower alkyl- or alkoxy-substituted naphthyl, or

a heteroaryl residue selected from pyrrole, thiophene, furan, oxazole, isoxazole, oxadiazole, imidazole, benzoxazole, benzothiazole, benzimidazole, benzofuran, or indole; and the remaining substituents R1, R2, R3, R4, R5, R6, and R7, which may be the same or different, are alkyl or arylalkyl residues contg. 1 to 16 aliph. carbon atoms, or aryl or heteroaryl residues, where the aryl residue is unsubstituted Ph, unsubstituted naphthyl, lower alkyl- or alkoxy-substituted Ph, or lower alkyl- or alkoxy-substituted naphthyl, and where the heteroaryl residue is pyrrole, thiophene, furan, oxazole, isoxazole, oxadiazole, imidazole, benzoxazole, benzothizole, benzimidazole, benzofuran, or indole, or H). Sym. substituteed fluorophores are conveniently synthesized from a single pyrrole precursor in a "one-pot" reaction. Alternatively, these fatty acid deris. may be synthesized from two different pyrrole precursors. The combination of fatty acids with these elec. neutral, photostable, strongly colored, and mostly highly fluorescent dipyrromethene boron difluoride dyes having relatively narrow absorption and emission spectra results in an improved fluorescent probe particularly useful for studying natural and synthetic lipid membranes and related areas.

L17 ANSWER 15 OF 36 REGISTRY COPYRIGHT 1999 ACS
RN 148334-97-8 REGISTRY
CN Pyridine, 1,2,3,6-tetrahydro-1-methyl-4-[2-(2-naphthalenyl)ethyl]-, hydrochloride (9CI) (CA INDEX NAME)
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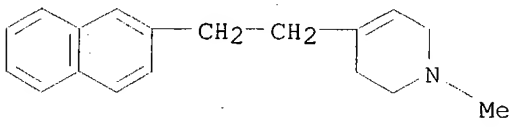
LC STN Files: CA, CAPLUS
CRN (148334-89-8)



● HCl

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 119:23382 Molecular size and flexibility as determinants of selectivity in the oxidation of N-methyl-4-phenyl-1,2,3,6-tetrahydropyridine analogs by monoamine oxidase A and B. Efange, S. M. N.; Michelson, R. H.; Tan, A. K.; Krueger, M. J.; Singer, T. P. (Dep. Radiol., Univ. Minnesota, Minneapolis, MN, 55455, USA). J. Med. Chem., 36(9), 1278-83 (English) 1993. CODEN: JMCMAR. ISSN: 0022-2623.

AB The introduction of a methylene bridge between the Ph and tetrahydropyridyl moieties of 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP) results in increased selectivity for monoamine oxidase B (MAO B) over monoamine oxidase A (MAO A). However, lengthening of this bridge results in a total loss of selectivity. In the present study, a no. of isomeric 4-naphthyl-, 4-(naphthylalkyl)-, 4-thienyl-, and 4-(thienylalkyl)tetrahydropyridines, conformationally restrained and

flexible analogs of MPTP, were synthesized and evaluated as potential selective substrates of MAO A and B. In terms of the parameter (turnover no.)/Km, the bulky naphthyl analogs were invariably better substrates MAO A than kynuramine, the ref. substrate for this enzyme. In addn., all naphthyl analogs, regardless of conformational mobility, were more effective substrates of MAO A than MAO B. Similarly, all thienyl analogs were found to be more effective substrates of MAO B. In contrast to the naphthalenes, the conformationally restrained thiophenes were found to be poor substrates of MAO B, relative to benzylamine, the ref. substrate. These results suggest that the selectivity of these compds. for either MAO A or B is detd. by the complex interplay of mol. size and flexibility. In this interplay, either one of these two factors may predominate.

L17 ANSWER 16 OF 36 REGISTRY COPYRIGHT 1999 ACS
RN 148334-96-7 REGISTRY
CN Pyridine, 1,2,3,6-tetrahydro-1-methyl-4-[2-(1-naphthalenyl)ethyl]-, hydrochloride (9CI) (CA INDEX NAME)
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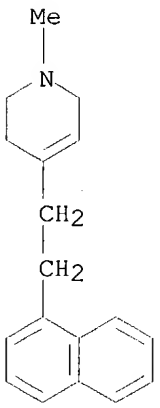
LC STN Files: CA, CAPLUS
CRN (148334-92-3)



● HCl

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 119:23382 Molecular size and flexibility as determinants of selectivity in the oxidation of N-methyl-4-phenyl-1,2,3,6-tetrahydropyridine analogs by monoamine oxidase A and B. Efange, S. M. N.; Michelson, R. H.; Tan, A. K.; Krueger, M. J.; Singer, T. P. (Dep. Radiol., Univ. Minnesota, Minneapolis, MN, 55455, USA). J. Med. Chem., 36(9), 1278-83 (English) 1993. CODEN: JMCMAR. ISSN: 0022-2623.

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isomeric 4-naphthyl-, 4-(naphthylalkyl)-, 4-thienyl-, and 4-(thienylalkyl)tetrahydropyridines, conformationally restrained and flexible analogs of MPTP, were synthesized and evaluated as potential selective substrates of MAO A and B. In terms of the parameter (turnover no.)/Km, the bulky naphthyl analogs were invariably better substrates MAO A than kynuramine, the ref. substrate for this enzyme. In addn., all naphthyl analogs, regardless of conformational mobility, were more effective substrates of MAO A than MAO B. Similarly, all thienyl analogs were found to be more effective substrates of MAO B. In contrast to the naphthalenes, the conformationally restrained thiophenes were found to be poor substrates of MAO B, relative to benzylamine, the ref. substrate. These results suggest that the selectivity of these compds. for either MAO A or B is detd. by the complex interplay of mol. size and flexibility. In this interplay, either one of these two factors may predominate.

L17 ANSWER 17 OF 36 REGISTRY COPYRIGHT 1999 ACS
RN 148334-92-3 REGISTRY
CN Pyridine, 1,2,3,6-tetrahydro-1-methyl-4-[2-(1-naphthalenyl)ethyl]- (9CI) (CA INDEX NAME)
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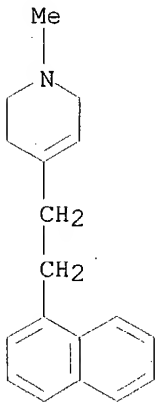

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 119:23382 Molecular size and flexibility as determinants of selectivity in the oxidation of N-methyl-4-phenyl-1,2,3,6-tetrahydropyridine analogs by monoamine oxidase A and B. Efange, S. M. N.; Michelson, R. H.; Tan, A. K.; Krueger, M. J.; Singer, T. P. (Dep. Radiol., Univ. Minnesota, Minneapolis, MN, 55455, USA). J. Med. Chem., 36(9), 1278-83 (English) 1993. CODEN: JMCMAR. ISSN: 0022-2623.

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L17 ANSWER 18 OF 36 REGISTRY COPYRIGHT 1999 ACS
RN 148334-89-8 REGISTRY
CN Pyridine, 1,2,3,6-tetrahydro-1-methyl-4-[2-(2-naphthalenyl)ethyl]- (9CI) (CA INDEX NAME)
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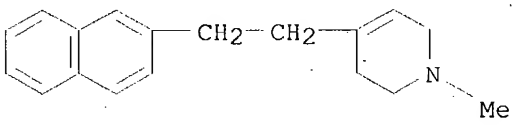
SR CA
LC STN Files: CA, CAPLUS



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 119:23382 Molecular size and flexibility as determinants of selectivity in the oxidation of N-methyl-4-phenyl-1,2,3,6-tetrahydropyridine analogs by monoamine oxidase A and B. Efange, S. M. N.; Michelson, R. H.; Tan, A. K.; Krueger, M. J.; Singer, T. P. (Dep. Radiol., Univ. Minnesota, Minneapolis, MN, 55455, USA). J. Med. Chem., 36(9), 1278-83 (English) 1993. CODEN: JMCMAR. ISSN: 0022-2623.

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L17 ANSWER 19 OF 36 REGISTRY COPYRIGHT 1999 ACS
RN 145007-18-7 REGISTRY
CN 4-Piperidineethanol, .alpha.-1-naphthalenyl-1-(phenylmethyl)- (9CI) (CA INDEX NAME)
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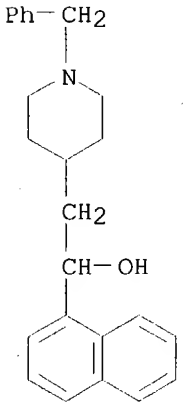
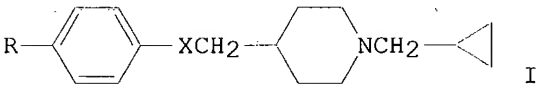
SR CA
LC STN Files: CA, CAPLUS



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 118:59540 Novel piperidine .sigma. receptor ligands as potential antipsychotic drugs. Gilligan, Paul J.; Cain, Gary A.; Christos, Thomas E.; Cook, Leonard; Drummond, Spencer; Johnson, Alexander L.; Kergaye, Ahmed A.; McElroy, John F.; Rohrbach, Kenneth W.; et al. (Cent. Nerv. Syst. Dis. Res., Du Pont Merck Pharm. Co., Wilmington, DE, 19880-0353, USA). J. Med. Chem., 35(23), 4344-61 (English) 1992. CODEN: JMCMAR. ISSN: 0022-2623.

GI



I

AB .sigma. Receptor ligands represent a new class of potential antipsychotic drugs. This paper presents the structure-activity relationships leading to novel disubstituted piperidine .sigma. ligands, which have little or no affinity for dopamine D2 receptors. Selectivity for .sigma. sites over dopamine D2 or serotonin 5-HT2 receptors appears to be governed by the chem. nature of the piperidine nitrogen substituent, its distance from the basic nitrogen, and its orientation relative to the other piperidine substituent. Several of these compds. have good oral potency in some animal models used to evaluate potential antipsychotic drugs. The

N-cyclopropylmethyl ketones and ethers I (R = cyano, F; X = CO, O) have the best in vivo potency. I (R = cyano, F; X = CO) did not cause catalepsy in the rat, even at very high doses. Based on the pharmacol. profiles of these .sigma. ligands, these compds. may be effective antipsychotic drugs, which do not induce extrapyramidal side effects or tardive dyskinesia.

L17 ANSWER 20 OF 36 REGISTRY COPYRIGHT 1999 ACS
RN 137995-89-2 REGISTRY
CN 4-Piperidineethanol, .alpha.-2-naphthalenyl-1-(phenylmethyl)- (9CI) (CA INDEX NAME)
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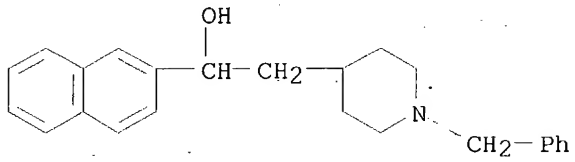
LC STN Files: CA, CAPLUS, USPATFULL



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 116:20946 Preparation of 4-(2-aryloxoethyl- or -hydroxyethyl)-1-aralkylpiperidines and analogs as psychotropic agents. Cain, Gary Avonn; Gilligan, Paul Joseph; Tam, Sang William (Du Pont Merck Pharmaceutical Co., USA). Eur. Pat. Appl. EP 449186 A2 19911002, 43 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE. (English). CODEN: EPXXDW. APPLICATION: EP 91-104711 19910326. PRIORITY: US 90-500573 19900328.

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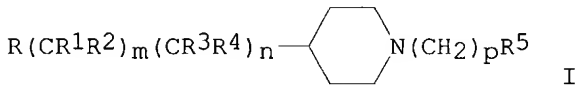

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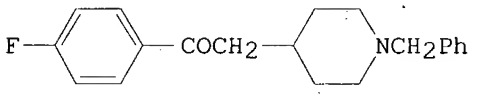

II

AB The title compds. [I; R, R5 = (un)substituted Ph, naphthyl, pyridyl, pyrimidinyl, etc.; R1, R3 = H, alkyl, OH, alkoxy, CO2H, halo, etc.; R2, R4 = H, alkyl; R1R2, R3R4 = O (not simultaneously)] were prepd. Thus, R6CHO (R6 = 1-benzyl-4-piperidyl throughout) (prepn. given) was condensed with Ph3P+CH2OMeCl- and the product hydrolized to give R6CH2CHO which was condensed with 4-FC6H4MgBr and the product oxidized to give title compd. II, the maleate of which had "potent activity" in inhibiting isolation-induced aggressive behavior in mice.

L17 ANSWER 21 OF 36 REGISTRY COPYRIGHT 1999 ACS
RN 122429-53-2 REGISTRY
CN Pyridine, 1,2,3,6-tetrahydro-1,4-dimethyl-5-[2-(1-naphthalenyl)ethyl]-(9CI) (CA INDEX NAME)
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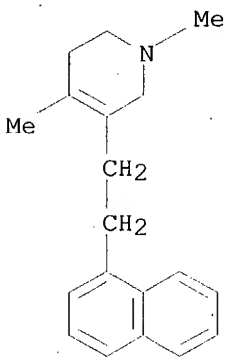

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 111:133968 Intramolecular alkylations of aromatic compounds. XXV. The synthesis of hexahydro-7H-naphtho[1,8-fg]quinolines and -isoquinolines. Reimann, Eberhard; Hargasser, Eugen (Inst. Pharm. Lebensmittelchem., Univ. Muenchen, Munich, D-8000/2, Fed. Rep. Ger.). Arch. Pharm. (Weinheim, Ger.), 322(6), 363-7 (German) 1989. CODEN: ARPMAS. ISSN: 0365-6233.

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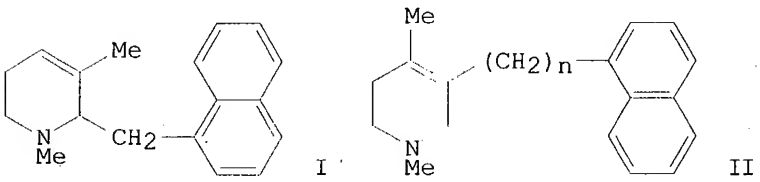

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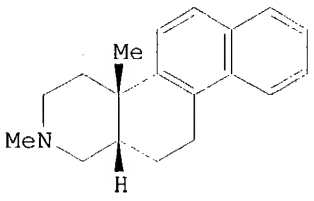
II



III

AB The carbinol prepd. from 2-bromo-3-methylpyridine and 1-naphthaldehyde was oxidized to the ketone and reduced, quanternized, and reduced to give the tetrahydropyridine I which failed to cyclize. The isomer II (n = 1) was prepd. similarly and also failed to cyclize. Cyclization of II (n = 2)

gave the naphthoisoquinoline III.

L17 ANSWER 22 OF 36 REGISTRY COPYRIGHT 1999 ACS
RN 113009-56-6 REGISTRY
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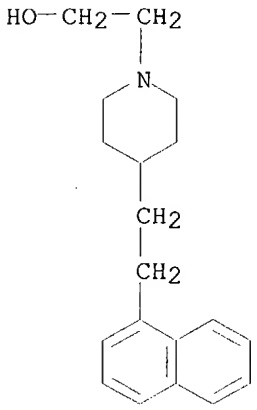
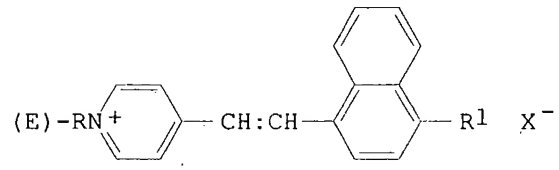


● HCl

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 108:150270 Approaches to protection against nerve agent poisoning. (Naphthylvinyl)pyridine derivatives as potential antidotes. Gray, Allan P.; Platz, Robert D.; Henderson, Theresa R.; Chang, Timothy C.
P.; Takahashi, Kazuyuki; Dretchen, Kenneth L. (Dynamac Corp., Rockville, MD, 20852, USA). J. Med. Chem., 31(4), 807-14 (English) 1988. CODEN: JMCMAR. ISSN: 0022-2623.
GI



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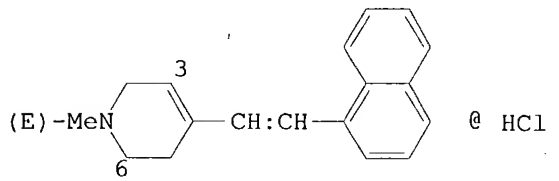
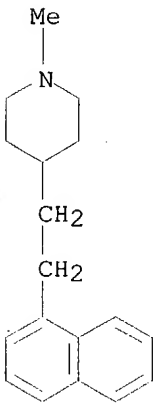


III

AB Twenty-nine analogs of (E)-4-(1-naphthylvinyl)pyridine methiodide, a potent inhibitor of choline acetyltransferase (I), were prepd. and evaluated for their ability to inhibit I and also to protect against the organophosphorus nerve agents sarin and soman. (Naphthylvinyl)pyridinium bromide II (R = HOCH2CH2, R1 = H, X = Br), -tetrahydropyridinium hydrochloride III, and the 3,4-dihydro analog of III, (E)-1-methyl-4-(1-naphthylvinyl)piperidinium hydrochloride (IV) afforded significant protection against sarin in the mouse and against soman in the guinea pig.
However, protection was not related to inhibition of I, as IV, the most effective nerve agent-protecting compd., showed no inhibition of I. Several (naphthylvinyl)pyridinium salts were effective in slowing the rate
of aging of soman-inhibited acetylcholinesterase. The most effective compd. in this regard, II (R = Me, R1 = OMe, X = Cl), however, did not provide significant protection against soman in the mouse.

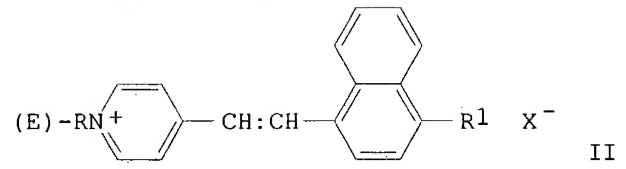
L17 ANSWER 23 OF 36 REGISTRY COPYRIGHT 1999 ACS
RN 113009-54-4 REGISTRY
CN Piperidine, 1-methyl-4-[2-(1-naphthalenyl)ethyl]-, hydrochloride (9CI) (CA INDEX NAME)
MF C18 H23 N . Cl H
SR CA
LC STN Files: CA, CAPLUS, CASREACT



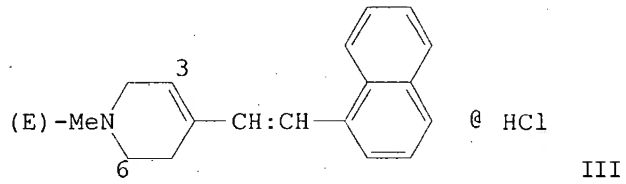
● HCl

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 108:150270 Approaches to protection against nerve agent poisoning. (Naphthylvinyl)pyridine derivatives as potential antidotes. Gray, Allan P.; Platz, Robert D.; Henderson, Theresa R.; Chang, Timothy C.
P.; Takahashi, Kazuyuki; Dretchen, Kenneth L. (Dynamac Corp., Rockville, MD, 20852, USA). J. Med. Chem., 31(4), 807-14 (English) 1988. CODEN: JMCMAR. ISSN: 0022-2623.
GI



II

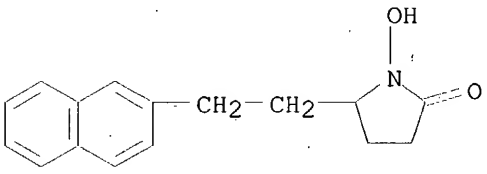


III

AB Twenty-nine analogs of (E)-4-(1-naphthylvinyl)pyridine methiodide, a potent inhibitor of choline acetyltransferase (I), were prepd. and evaluated for their ability to inhibit I and also to protect against the organophosphorus nerve agents sarin and soman. (Naphthylvinyl)pyridinium bromide II (R = HOCH2CH2, R1 = H, X = Br), -tetrahydropyridinium hydrochloride III, and the 3,4-dihydro analog of III, (E)-1-methyl-4-(1-naphthylvinyl)piperidinium hydrochloride (IV) afforded significant protection against sarin in the mouse and against soman in the guinea pig.

However, protection was not related to inhibition of I, as IV, the most effective nerve agent-protecting compd., showed no inhibition of I. Several (naphthylvinyl)pyridinium salts were effective in slowing the rate of aging of soman-inhibited acetylcholinesterase. The most effective compd. in this regard, II (R = Me, R1 = OMe, X = Cl), however, did not provide significant protection against soman in the mouse.

L17 ANSWER 24 OF 36 REGISTRY COPYRIGHT 1999 ACS
RN 106328-69-2 REGISTRY
CN 2-Pyrrolidinone, 1-hydroxy-5-[2-(2-naphthalenyl)ethyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C16 H17 N O2
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

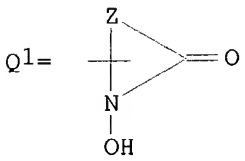


2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 113:115323 Preparation of nonsteroidal antiinflammatory drugs. Jackson, William Paul; Pettipher, Eric Roy (Wellcome Foundation Ltd., UK).
PCT Int. Appl. WO 9001929 A1 19900308, 54 pp. DESIGNATED STATES: W: JP, US; RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE. (English). CODEN: PIXXD2. APPLICATION: WO 89-GB992 19890825. PRIORITY: GB 88-20185

19880825.

GI



AB Ar(LAr1)q(X)k(Y)pQ [I; k, p, q = 0.1; provided that when k = 1, p = 1; Ar = (un)substituted furyl, thienyl 1,1-dioxide, pyrryl, pyridyl, benzofuryl, Ph, etc.: L = (CH2)r, O, CH2O, CH2S, OCH2, CONH, NHCO, CO, CH2NH; r = 1-4; Ar1 = (un)substituted phenylene, thienylene, or pyridylene; X = O, S, CO; Y = C1-10 alkylene or alkenylene; Q = Q1, (CO)nN(OR1)(CO)mR2; m, n = 0, 1; when n = 1, m = 0 and R1,R2 = H, C1-4 alkyl or R2 = C5-7 cylcoalkyl; when n = 0, m = 1, R1 = H, C1-4 alkyl, any one of Ar, alkanoyl, or (un)substituted CONH2 and R2 = H, C1-4 alkyl, NH2, C1-4 mono- or dialkylamino, anilino, etc.; Z = C2-5 alkylene optionally interrupted by a hetero atom], useful for treatment of arthritis, e.g., rheumatoid arthritis, rheumatoid spondylitis, osteoarthritis, gouty arthritis, or reactive arthritis, are prepd. Thus, a soln. of HSCH2CO2Me in THF was added dropwise to 1-(1-naphthyl)-2-nitroethene and Et3N in THF and after stirring 30 min at room temp., the mixt. was evapd. in vacuo, dissolved in satd. aq. NH4Cl in 95 % EtOH, and then stirred 30 min with Zn powder to give 5,6-dihydro-1-hydroxy-5-(1-naphthyl)-1,4-thiazine-3(2H,4H)-one. A total of 88 I were prepd. N-(3-Phenoxycinnamyl)acetohydroxamic acid (II) reduced the ovalbumin-induced swelling (arthritis) in the right knee joint of rabbits immunized with ovalbumin in Freund's complete adjuvant and II in combination with indomethacin, up to 51 %. Tablets and an injection soln. contg. II were formulated.

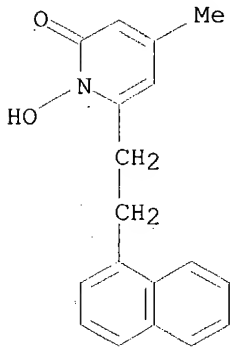
REFERENCE 2: 106:175956 Preparation of aryl hydroxamic acid derivatives, compositions containing them, and their use in medicine and other applications.. Kneen, Geoffrey; Jackson, William Paul; Islip, Peter John; Wates, Peter John (Wellcome Foundation Ltd., UK). Eur. Pat. Appl. EP 196184 A2 19861001, 27 pp. DESIGNATED STATES: R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE. (English). CODEN: EPXXDW. APPLICATION: EP 86-301895 19860314. PRIORITY: GB 85-6870 19850316; GB 85-6871 19850316; GB 85-6872 19850316; GB 85-6873 19850316; GB 85-6874 19850316; GB 85-13863 19850601; GB 85-31839 19851230.

GI For diagram(s), see printed CA Issue.

AB Ar(LAr1)qXkYpQ [k,p,q = 0,1; Ar = (un)substituted Ph, naphthyl, tetrahydronaphthyl, or pyridyl; L = (CH2)r (r = 1-4), O, CH2O, CH2S, OCH2, CONH, NHCO, CO, CH2NH; Ar1 = (un)substituted C6H4, thienylene, or pyridylene; X = O, S, CO; Y = C1-10 alkylene; Q = (CO)nN(OR1)(CO)mR2 [m +

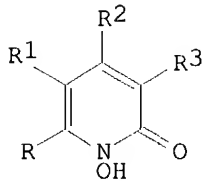
n = 1; R1 = H, C1-4alkyl, Ar, COR3; R2 = C5-7 cycloalkyl, (di)(alkyl)amino, cycloalkylamine, PhNH, N-alkylanilino, Ar; R3 = C1-4 (un)substituted by CO2H- or C1-4 alkoxycarbonyl, NR4R5; R4 = H,C1-4 alkyl; R5 = R4, (un)substituted Ph], Q1 (Z = C2-5 alkylene with optional hetero interrupter), 1-hydroxy-1,3-dihydro-2-oxoimidazolyl], inhibitors of lipoxygenase and (or) cyclooxygenase and having useful medical prophylactic and therapeutic properties, were prepd. by 4 methods. A soln. of 3-PhOC6H4CH:CHCO2H [prepd. from 3-PhOC6H4CHO with CH2(CO2H)2] and NEt3 in THF was treated with MeO2CCl at 3.degree., aq. MeNHOH.HCl was added, and the mixt. stirred 2 h to give 3-phenoxy-N-methylcinnamohydroxamic acid (I). The IC50 of I was 3.0.mu.M against cyclooxygenase and <0.1 .mu.M against lipoxygenase (incubation of human leukocyte with arachidonic acid). A powder capsule for inhalation contained 4 mg I and 46.0 mg lactose .

L17 ANSWER 25 OF 36 REGISTRY COPYRIGHT 1999 ACS
RN 79438-26-9 REGISTRY
CN 2(1H)-Pyridinone, 1-hydroxy-4-methyl-6-[2-(1-naphthalenyl)ethyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C18 H17 N O2
LC STN Files: BEILSTEIN*, CA, CAPLUS
(*File contains numerically searchable property data)

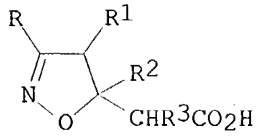


1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

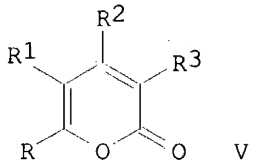
REFERENCE 1: 95:168941 Chemistry of antimicrobially active 1-hydroxy-2-pyridones. Lohaus, G.; Dittmar, W. (Hoechst A.-G., Frankfurt/Main, D-6230/80, Fed. Rep. Ger.). Arzneim.-Forsch., 31(8A), 1311-16 (German) 1981. CODEN: ARZNAD. ISSN: 0004-4172.
GI



I



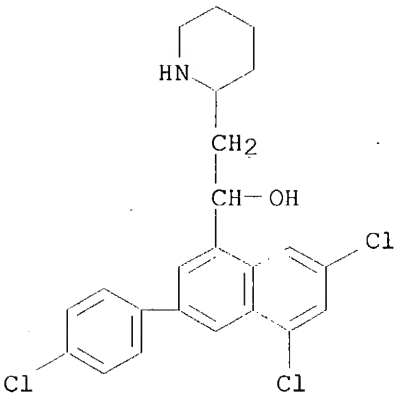
IV



V

AB The title compds. [I; R-R3 = H, alkyl, cycloalkyl, (substituted) Ph or PhCH2, C10H7, furyl, etc.] were prepd. by the condensation of RCOCHR1CR2:CR3CO2Me (II) and RCOCR1:CR2CHR3CO2Me (III) with NH2OH. However, in many cases IV were formed as by-products. Therefore, II and III were first cyclized to the pyrones V, which reacted with NH2OH in the presence of a base, e.g., 2-aminopyridine, to give I. I exhibited fungicidal activity against Trichophyton mentagrophytes, Candida albicans, and Aspergillus fumigatus in vitro as well as in exptl. guinea pig dermatophytosis.

L17 ANSWER 26 OF 36 REGISTRY COPYRIGHT 1999 ACS
RN 68628-08-0 REGISTRY
CN 2-Piperidineethanol, .alpha.-[5,7-dichloro-3-(4-chlorophenyl)-1-naphthalenyl]-, hydrochloride (9CI) (CA INDEX NAME)
MF C23 H22 Cl3 N O . Cl H
LC STN Files: CA, CAPLUS, TOXLIT

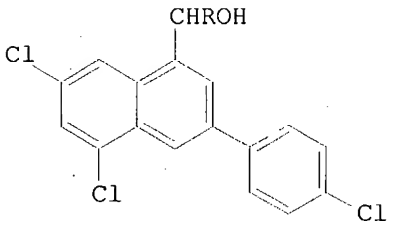


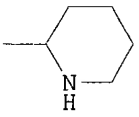
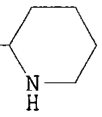
● HCl

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 90:48247 Antimalarials. 4. Trichloronaphthalene amino alcohols. Shamblee, Dwight A.; Gillespie, J. Samuel, Jr. (Dep. Chem., Univ. Richmond, Richmond, Va., USA). J. Med. Chem., 22(1), 86-9 (English)
1979. CODEN: JMCMAR. ISSN: 0022-2623.

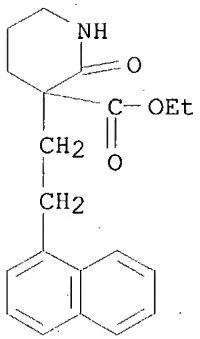
GI



I, R=CH_2NBu_2, @ HCl
II, R=$CH_2CH_2NBu_2$, @ HCl
III, R=  , @ AcOH
IV, R=CH_2  , @ HCl

AB Four title compds. I [68575-50-8], II [68628-08-0], III [68575-51-9], and IV [68575-53-1] were synthesized and tested as antimalarials, vs. Plasmodium berghei, in mice. All of the compds. were active; II was the most active. Structure-activity relations between the naphthalene and quinoline isosteres are discussed.

L17 ANSWER 27 OF 36 REGISTRY COPYRIGHT 1999 ACS
RN 63930-95-0 REGISTRY
CN 3-Piperidinecarboxylic acid, 3-[2-(1-naphthalenyl)ethyl]-2-oxo-, ethyl ester (9CI) (CA INDEX NAME)
FS. 3D CONCORD
MF C20 H23 N O3
LC STN Files: BEILSTEIN*, CA, CAPLUS
(*File contains numerically searchable property data)



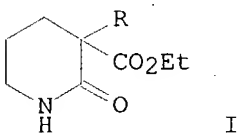
3 REFERENCES IN FILE CA (1967 TO DATE)
3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 87:184378 3-Substituted 3-ethoxycarbonyl-2-piperidones. Kikumoto, Ryoji; Okubo, Kazuo (Mitsubishi Chemical Industries Co., Ltd., Japan). Japan. Kokai JP 52083671 19770712 Showa, 3 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 76-223 19760101.
GI For diagram(s), see printed CA Issue.

AB Title compds. I [R = Ph, 1-naphthylmethyl, PhCH2, 2-(1-naphthyl)ethyl] were prepd. by catalytic redn. of NCCH2CH2CR(CO2Et)2. Thus, a mixt. of 8.67 g NCCH2CH2CPh(CO2Et)2, 0.4 g Ni-SiO2, and 80 kg/cm2 H in EtOH was shaken 5 h at 100.degree. to give 69% I (R = Ph).

REFERENCE 2: 87:184018 2-Substituted-5-aminovaleric acids. Kikumoto, Ryoji;
Okubo, Kazuo (Mitsubishi Chemical Industries Co., Ltd., Japan). Japan. Kokai JP 52083602 19770712 Showa, 3 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 76-221 19760101.
GI For diagram(s), see printed CA Issue.
AB Four title acids H2N(CH2)3CHRCO2H I [R = Ph, 1-naphthylmethyl, 2-(1-naphthyl)ethyl, PhCH2] were prepd. by hydrolysis of piperidones II. Thus, stirring II (R = Ph) with 40% aq. H2SO4 4 h at 110.degree. gave 89.1% I (R = Ph).

REFERENCE 3: 87:117782 3-Substituted-3-ethoxycarbonyl-2-piperidinones. Kikumoto, Ryoji; Okubo, Kazuo (Mitsubishi Chemical Industries Co., Ltd., Japan). Japan. Kokai JP 52010277 19770126 Showa, 3 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 75-86086 19750714.
GI



I

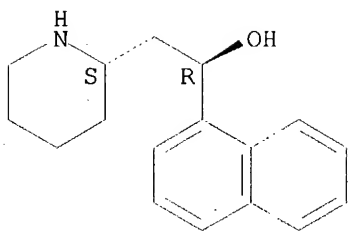
AB Four 3-substituted-3-ethoxycarbonyl-2-piperidones I (R = Ph, .alpha.-naphthylmethyl, PhCH2, .alpha.-naphthylethyl) were prepd. by redn.
of Et .alpha.-substituted-.alpha.-(2-cyanoethyl)malonates NCCH2CH2CR(CO2Et)2 in the presence of H-activating catalysts. Thus, a mixt. of 8.67 g NCCH2CH2CEt(CO2Et)2, 0.4 g Ni-SiO2, and 80 kg/cm2 H in EtOH was autoclaved 5 h at 100.degree. to give 69% I (R = Et).

L17 ANSWER 28 OF 36 REGISTRY COPYRIGHT 1999 ACS
RN 60000-90-0 REGISTRY
CN Acetic acid, hydroxy-, compd. with (R*,S*)-.alpha.-1-naphthalenyl-2-piperidineethanol (1:1) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 2-Piperidineethanol, .alpha.-1-naphthalenyl-, (R*,S*)-, hydroxyacetate (salt) (9CI)
FS STEREOSEARCH
MF C17 H21 N O . C2 H4 O3
LC STN Files: BEILSTEIN*, CA, CAPLUS
(*File contains numerically searchable property data)

CM 1

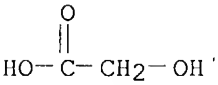
CRN 60000-89-7
CMF C17 H21 N O

Relative stereochemistry.



CM 2

CRN 79-14-1
CMF C2 H4 O3



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

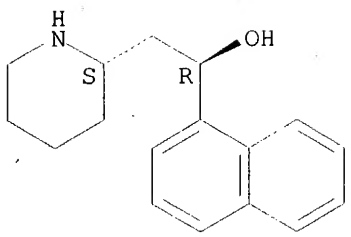
REFERENCE 1: 85:116538 (2-Piperidine)- and (2-pyrrolidine)ethanones and -ethanols as inhibitors of blood platelets aggregation. Grisar, J. Martin; Claxton, George P.; Stewart, Kenneth T.; MacKenzie, Robert D.; Kariya, Takashi (Merrell-Natl. Lab., Div., Richardson-Merrell Inc., Cincinnati, Ohio, USA). J. Med. Chem., 19(10), 1195-1201 (English) 1976. CODEN: JMCMAR.

GI For diagram(s), see printed CA Issue.

AB RMI 14133A [(E)-4-[4-(methylthio)phenyl]-1-(2-piperidinyl)-3-buten-2-one-HCl](I) [59999-96-1] inhibited ADP-induced aggregation of blood platelets.
I was selected from a large series of (2-piperidinyl)- and (2-pyrrolidinyl)ethanones synthesized by a modified Schoepf reaction from enolate Mg salts of .beta.-keto acids and 2,3,4,5-tetrahydropyridine trimer [27879-53-4] or 3,4-dihydro-2H-pyrrole trimer [54564-48-6], resp. Subacute toxicity evaluation in dogs and guinea pigs showed I to have an unfavorable therapeutic ratio. RMI 12436A [1-[4'-chloro(1,1'-biphenyl)-4-yl]-2-(2-piperidinyl)ethanone-HCl](II) [54916-69-7] lowered serum cholesterol [57-88-5] levels in rats with concurrent accumulation of (3.beta.)-cholesta-5,7-dien-3-ol [434-16-2], suggesting inhibition of 7-dehydrocholesterol .DELTA.7-reductase [37255-33-7].

L17 ANSWER 29 OF 36 REGISTRY COPYRIGHT 1999 ACS
RN 60000-89-7 REGISTRY
CN 2-Piperidineethanol, .alpha.-1-naphthalenyl-, (R*,S*)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C17 H21 N O
CI COM

Relative stereochemistry.

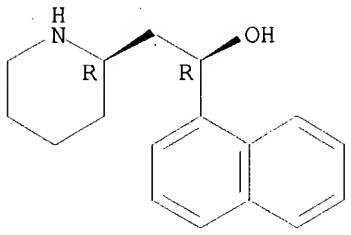


L17 ANSWER 30 OF 36 REGISTRY COPYRIGHT 1999 ACS
RN 60000-46-6 REGISTRY
CN Acetic acid, hydroxy-, compd. with (R*,R*)-.alpha.-1-naphthalenyl-2-piperidineethanol (1:1) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 2-Piperidineethanol, .alpha.-1-naphthalenyl-, (R*,R*)-, hydroxyacetate (salt) (9CI)
FS STEREOSEARCH
MF C17 H21 N O . C2 H4 O3
LC STN Files: BEILSTEIN*, CA, CAPLUS
(*File contains numerically searchable property data)

CM 1

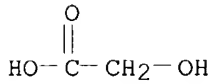
CRN 60000-45-5
CMF C17 H21 N O

Relative stereochemistry.



CM 2

CRN 79-14-1
CMF C2 H4 O3



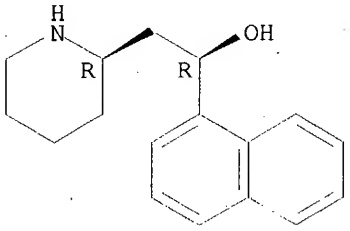
1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 85:116538 (2-Piperidine)- and (2-pyrrolidine)ethanones and -ethanols as inhibitors of blood platelets aggregation. Grisar, J. Martin; Claxton, George P.; Stewart, Kenneth T.; MacKenzie, Robert D.; Kariya, Takashi (Merrell-Natl. Lab., Div., Richardson-Merrell Inc., Cincinnati, Ohio, USA). J. Med. Chem., 19(10), 1195-1201 (English) 1976.

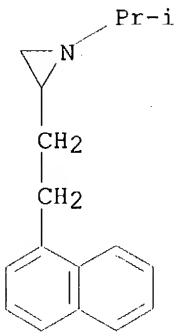
CODEN: JMCMAR.
GI For diagram(s), see printed CA Issue.
AB RMI 14133A [(E)-4-[4-(methylthio)phenyl]-1-(2-piperidinyl)-3-buten-2-one-HCl](I) [59999-96-1] inhibited ADP-induced aggregation of blood platelets.
I was selected from a large series of (2-piperidinyl)- and (2-pyrrolidinyl)ethanones synthesized by a modified Schoepf reaction from enolate Mg salts of .beta.-keto acids and 2,3,4,5-tetrahydropyridine trimer [27879-53-4] or 3,4-dihydro-2H-pyrrole trimer [54564-48-6], resp. Subacute toxicity evaluation in dogs and guinea pigs showed I to have an unfavorable therapeutic ratio. RMI 12436A [1-[4'-chloro(1,1'-biphenyl)-4-yl]-2-(2-piperidinyl)ethanone-HCl](II) [54916-69-7] lowered serum cholesterol [57-88-5] levels in rats with concurrent accumulation of (3.beta.)-cholesta-5,7-dien-3-ol [434-16-2], suggesting inhibition of 7-dehydrocholesterol .DELTA.7-reductase [37255-33-7].

L17 ANSWER 31 OF 36 REGISTRY COPYRIGHT 1999 ACS
RN 60000-45-5 REGISTRY
CN 2-Piperidineethanol, .alpha.-1-naphthalenyl-, (R*,R*)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C17 H21 N O
CI COM

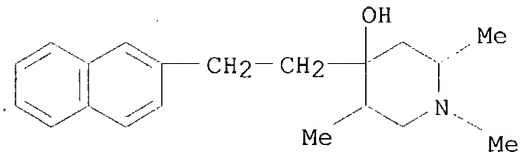
Relative stereochemistry.



L17 ANSWER 32 OF 36 REGISTRY COPYRIGHT 1999 ACS
RN 46928-48-7 REGISTRY
CN Aziridine, 1-(1-methylethyl)-2-[2-(1-naphthalenyl)ethyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C17 H21 N
CI COM
LC STN Files: BEILSTEIN*
(*File contains numerically searchable property data)



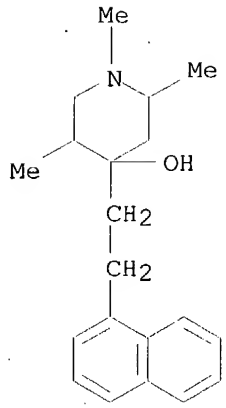
L17 ANSWER 33 OF 36 REGISTRY COPYRIGHT 1999 ACS
RN 40964-08-7 REGISTRY
CN 4-Piperidinol, 1,2,5-trimethyl-4-[2-(2-naphthalenyl)ethyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C20 H27 N O
CI COM
LC STN Files: BEILSTEIN*, CA, CAPLUS
(*File contains numerically searchable property data)



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 79:5534 Alkylation of nucleic acids and their components. VII.
Transformations of .gamma.-(N-.beta.-chloroethyl-N-methylamino)propylphthalimide during its reaction with guanosine.
Grineva, N. I.; Lomakina, T. S. (Inst. Org. Khim., Novosibirsk, USSR).
Khim. Geterotsikl. Soedin. (3), 413-18 (Russian) 1973. CODEN: KGSSAQ.
GI For diagram(s), see printed CA Issue.
AB Alkylation of guanosine by phthalimide deriv. (I) in aq. soln. at pH 5-6 gave guanosine deriv. (II). Acid hydrolysis of II by 1N HCl gave the corresponding guanine deriv.; 4N HCl cleaved the phthalimide deriv. to give guanine (III). At pH .gtoreq.9 I underwent cleavage of the phthalimide ring to give the o-carboxybenzoylamino deriv.; at pH 6 I self-alkylated to give quaternary ammonium bases. Rate consts. for the ionization of Cl from the .beta.-chloroethyl group in I were given.

L17 ANSWER 34 OF 36 REGISTRY COPYRIGHT 1999 ACS
RN 40964-07-6 REGISTRY
CN 4-Piperidinol, 1,2,5-trimethyl-4-[2-(1-naphthalenyl)ethyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C20 H27 N O
LC STN Files: BEILSTEIN*, CA, CAPLUS
(*File contains numerically searchable property data)



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 79:5534 Alkylation of nucleic acids and their components. VII.

Transformations of .gamma.-(N-.beta.-chloroethyl-N-methylamino)propylphthalimide during its reaction with guanosine.
Grineva, N. I.; Lomakina, T. S. (Inst. Org. Khim., Novosibirsk, USSR).
Khim. Geterotsikl. Soedin. (3), 413-18 (Russian) 1973. CODEN: KGSSAQ.

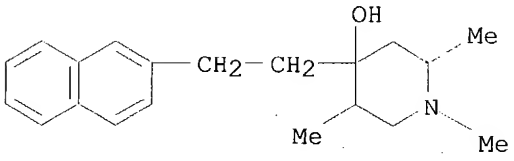
GI For diagram(s), see printed CA Issue.

AB Alkylation of guanosine by phthalimide deriv. (I) in aq. soln. at pH 5-6 gave guanosine deriv. (II). Acid hydrolysis of II by 1N HCl gave the corresponding guanine deriv.; 4N HCl cleaved the phthalimide deriv. to give guanine (III). At pH .gtoreq.9 I underwent cleavage of the phthalimide ring to give the o-carboxybenzoylamino deriv.; at pH 6 I self-alkylated to give quaternary ammonium bases. Rate consts. for the ionization of Cl from the .beta.-chloroethyl group in I were given.

L17 ANSWER 35 OF 36 REGISTRY COPYRIGHT 1999 ACS
RN 40963-35-7 REGISTRY
CN 4-Piperidinol, 1,2,5-trimethyl-4-[2-(2-naphthalenyl)ethyl]-, compd. with 2,4,6-trinitrophenol (1:1) (9CI) (CA INDEX NAME)
MF C20 H27 N O . C6 H3 N3 O7
LC STN Files: CA, CAPLUS

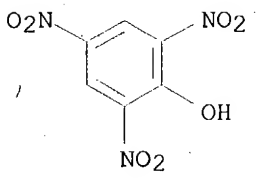
CM 1

CRN 40964-08-7
CMF C20 H27 N O



CM 2

CRN 88-89-1
CMF C6 H3 N3 O7



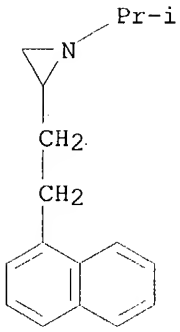
1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 78:159378 Condensation of 1,2,5-trimethyl-4-piperidone with ethyl- and naphthylacetylenes and synthesis of substituted pyridines. Prostakov, N. S.; Kholdarova, T.; Pleshakov, V. G.; Govor, S. Ya.; Shalimov, V. P. (Univ. Druzh. Nar. im. Lumumby, Moscow, USSR). Khim. Geterotsikl. Soedin. (3), 349-52 (Russian) 1973. CODEN: KGSSAQ.
GI For diagram(s), see printed CA Issue.
AB 4-Piperidinols (I, R=Et, 1-, 2-naphthyl) were prepd. in 17-100% yields by condensation of 1,2,5-trimethyl-4-piperidone with RC.tplbond.CH. Hydrogenation of I gave 86-94% of the corresponding alcs. II. Pyridineethanols (III, R=H, R1=Ph, Bu) were obtained in 27% and 45% yields, resp., by condensation of the apropriate 2,5-lutidine with CH2O. Dehydration of III gave 70% vinylpyridine (IV).

L17 ANSWER 36 OF 36 REGISTRY COPYRIGHT 1999 ACS
RN 28030-56-0 REGISTRY
CN Aziridine, 1-isopropyl-2-[2-(1-naphthyl)ethyl]-, monopicrate (8CI) (CA INDEX NAME)
MF C17 H21 N . C6 H3 N3 O7
LC STN Files: CA, CAPLUS, TOXLIT

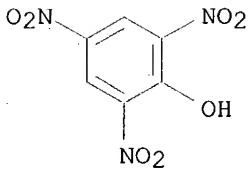
CM 1

CRN 46928-48-7
CMF C17 H21 N



CM 2

CRN 88-89-1
CMF C6 H3 N3 O7



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 72:132358 .beta.-Adrenergic blocking agents. VIII. Reactions of .beta.-haloalkylamines related to pronethalol and propranolol. Howe, Ralph (Pharm. Div., Imp. Chem. Ind., Ltd., Macclesfield, Engl.). J. Med. Chem., 13(3), 398-403 (English) 1970. CODEN: JMCMAR.

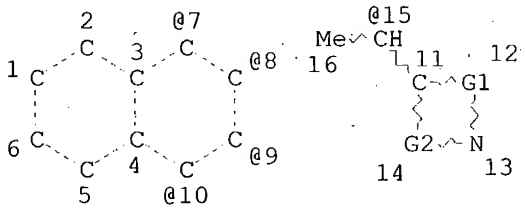
AB Some .beta.-haloalkylamines related to pronethalol and propranolol were prepd. Those of the pronethalol series are hydrolyzed in vitro and in vivo to the corresponding .beta.-hydroxyalkylamines, and are .beta.-adrenergic blocking agents. The .beta.-chloroalkylamine related to propranolol is not a .beta.-adrenergic blocking agent. It is hydrolyzed with difficulty in vitro to give mainly a position isomer of propranolol which is not a .beta.-adrenergic blocking agent. Pronethalol analogs having SH, NH2, NHMe, and OMe in place of the OH group are much less potent as .beta.-adrenergic blocking agents. Replacement of the ethereal O atom of propranolol by CH2 markedly reduces blocking potency.

=> s l31 not l33

L34 1 L31 NOT L33

=> d l34 que stat

L29 STR



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REP G2=(0-4) C
VPA 15-7/8/9/10 U
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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 16

STEREO ATTRIBUTES: NONE
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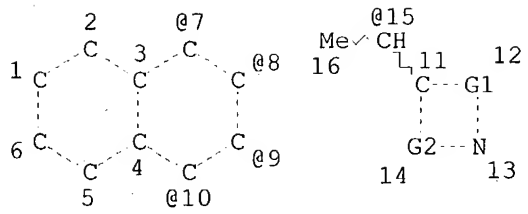
L32 STR



REP G1=(1-4) C
REP G2=(0-4) C
VPA 15-7/8/9/10 U
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
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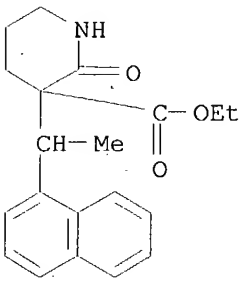
GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 16

STEREO ATTRIBUTES: NONE
L33 1 SEA FILE=REGISTRY SUB=L31 SSS FUL L32
L34 1 SEA FILE=REGISTRY ABB=ON PLU=ON L31 NOT L33

=> d ide cbib abs

L34 ANSWER 1 OF 1 REGISTRY COPYRIGHT 1999 ACS
RN 63930-96-1 REGISTRY
CN 3-Piperidinecarboxylic acid, 3-[1-(1-naphthalenyl)ethyl]-2-oxo-, ethyl ester (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C20 H23 N O3
LC STN Files: CA, CAPLUS



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 87:117782 3-Substituted-3-ethoxycarbonyl-2-piperidinones. Kikumoto, Ryoji; Okubo, Kazuo (Mitsubishi Chemical Industries Co., Ltd., Japan). Japan. Kokai JP 52010277 19770126 Showa, 3 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 75-86086 19750714.
GI

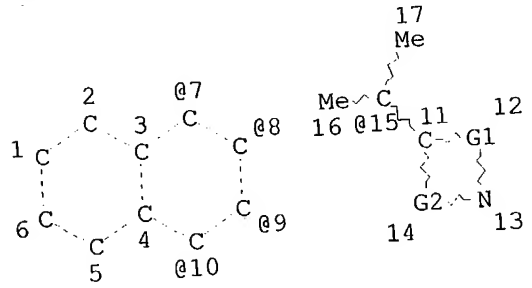
N
H

I

AB Four 3-substituted-3-ethoxycarbonyl-2-piperidones I (R = Ph, .alpha.-naphthylmethyl, PhCH2, .alpha.-naphthylethyl) were prepd. by redn. of Et .alpha.-substituted-.alpha.-(2-cyanoethyl)malonates NCCH2CH2CR(CO2Et)2 in the presence of H-activating catalysts. Thus, a mixt. of 8.67 g NCCH2CH2CEt(CO2Et)2, 0.4 g Ni-SiO2, and 80 kg/cm2 H in EtOH was autoclaved 5 h at 100.degree. to give 69% I (R = Et).

=> d l37 que stat

L35 STR



REP G1=(1-4) C
REP G2=(0-4) C
VPA 15-7/8/9/10 U
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 17

STEREO ATTRIBUTES: NONE
L37 0 SEA FILE=REGISTRY SSS FUL L35

0 ANSWERS

100.0% PROCESSED 25499 ITERATIONS
SEARCH TIME: 00.00.03

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